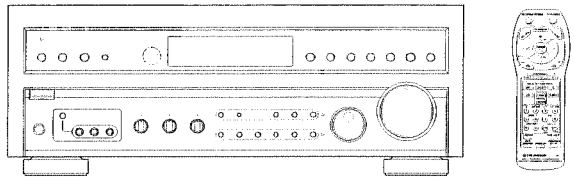
AUDIO/VIDEO MULTI-CHANNEL RECEIVER
RECEPTOR MULTICANAL DE AUDIO/VíDEO
音響 / 錄象多頻道接收器

Operating Instructions

Manual de instrucciones

操作說明書

ISC Intelligent System Control



VSX-D607S

PIONEER®

The Art of Entertainment

Thank you for buying this Pioneer product.
Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.
In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However the method of connecting and operating the unit is the same.

VENTILATION

- When installing this unit, make sure to leave space around the unit for ventilation to improve heat radiation (at least 60 cm at top, 10 cm at rear, and 30 cm at each side). If not enough space is provided between the unit and walls or other equipment , heat will build up inside, interfering with performance or causing malfunctions.
- Do not place on a thick carpet, bed, sofa or fabric having a thick pile. Do not cover with fabric or other covering.
  Anything that blocks ventilation will cause internal temperature to rise, which may lead to breakdown or fire hazard.

THE POWER SWITCH IS SECONDARY CONNECTED AND THEREFORE DOES NOT SEPARATE THE UNIT FROM MAINS POWER IN STANDBY POSITION.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

RESET function

Set the MASTER VOLUME to minimum before pressing the RESET button.
Use this function when normal operation is not possible due to external influences such as static electricity or lightning, or when operations are not functioning even when the operation switches are pressed. Press the RESET button to return to normal operating conditions.

IMPORTANT

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

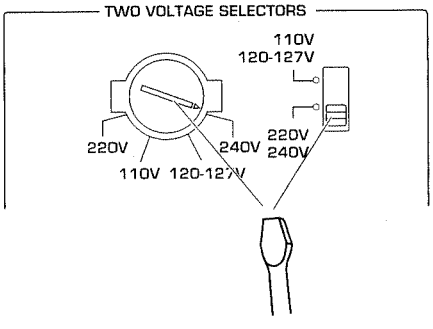
The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

TWO VOLTAGE SELECTOR SWITCHES

Only multi-voltage model is provided with these switches. Mains voltages in Saudi Arabia are 127 V and 220 V only. Never use this model with the 110 V setting in Saudi Arabia.

The line voltage selector switches are on the rear panel. Check that they are set properly before plugging the power cord into the household wall socket. If the voltage is not properly set or if you move to an area where the voltage requirements differ, adjust the selector switches as follows.

1. Use a medium-size screwdriver.
2. First, insert the screwdriver in the groove of the voltage selector at the left, and adjust so that the tip of the groove points to the voltage value of your area.
3. Next, insert the screwdriver in the groove of the voltage selector at the right and adjust until the voltage is the same as at the left.



Medium-size screwdriver

CHANNEL STEP SWITCH

The unit has been factory preset to the channel allocation value for the area in which it is to be sold. If this value is set incorrectly, the tuned in frequency may be wrong, or sound may be distorted, resulting in an inability to reproduce reception signals at their proper sound quality. For this reason, be sure to confirm that the values are set correctly before first using the unit.

(FM 100 kHz/AM 10 kHz) position:

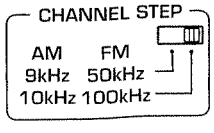
Set to this position for areas with an FM reception step of 100 kHz and AM 10 kHz.

(FM 50 kHz/AM 9 kHz) position:

Set to this position, for areas with an FM reception step of 50 kHz and AM 9 kHz.

NOTE:

When unsure about the channel allocation for your area, consult your dealer for correct information.



FEATURES

□ DOLBY DIGITAL

By playing back Dolby Digital-compatible LD and DVD software, the dynamic effects of movie theaters and concert halls can be easily enjoyed at home (The optional AC-3 RF demodulator is required for playing back Dolby Digital (AC-3) sounds of LDs).

□ DOLBY PRO LOGIC COMPATIBLE

Best suited for playing back movies and music by reproducing surround effects.

□ 100 W 5 ch EQUAL POWER DISCRETE AMPLIFIER

5 ch equal power discrete amplifier enables playback of high quality Dolby Digital effects.

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□ CONTROL OF OTHER MANUFACTURERS' EQUIPMENT USING THE MULTI CONTROL (UNIVERSAL) REMOTE CONTROL UNIT (Intelligent System Control)

Can be used to operate other manufacturers' products with the multi control remote control unit by presetting and learning functions.

□ VARIOUS SURROUND EFFECTS (DSP)

Reproduces five different surround effects.

4. VARIOUS OPERATIONS

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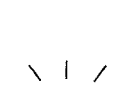
READING THIS MANUAL

■Meaning of Marks

Provides detailed precautions and advice on operations, etc.

Indicates that buttons or displays are blinking.

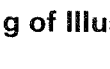


Indicates that buttons or displays are lit.

Indicates that display changes automatically.

Indicates that displays alternate.

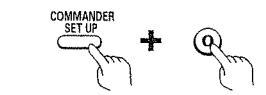
■Meaning of Illustrations



Means to press the ENTER button (of the remote control unit).

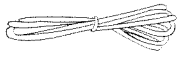
Means to rotate (adjust) the MULTI JOG.

Means to press the 0 button (of the remote control unit) while pressing the COMMANDER SET UP button (of the remote control unit).

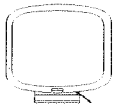


Means to press the VOL – or VOL + button (of the remote control unit).

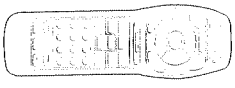
CHECKING ACCESSORIES



FM antenna



AM loop antenna



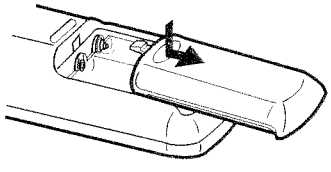
Remote control unit

Alkaline dry cell batteries (size "AA" IEC LR6) x 2

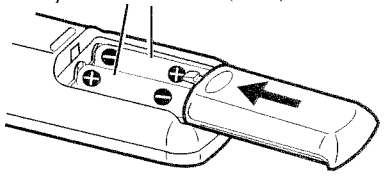
REMOTE CONTROL UNIT

Loading remote control batteries

1.



2. AA dry cell batteries (LR6)

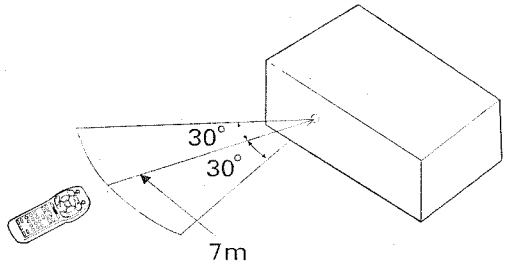


CAUTIONS

Incorrect use of batteries may result in such hazards as leakage and bursting. Observe the following precautions.

- Never use new and old batteries together.
- Insert the plus and minus sides of the batteries properly according to the marks in the battery compartment.
- Batteries with the same shape may have different voltages. Do not use different voltage batteries together.

Operating range of remote control unit

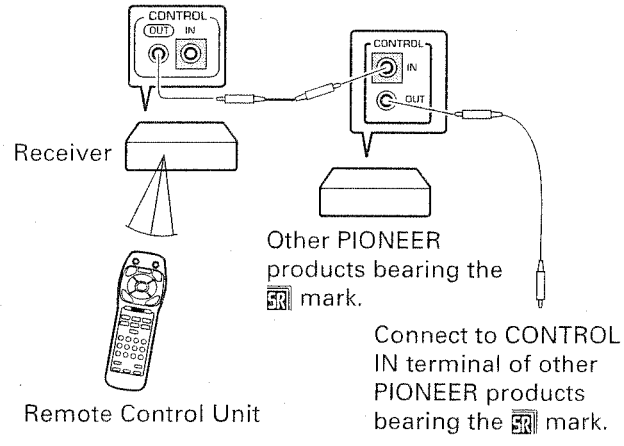


memo

- The remote control unit may not work if there are obstacles between the remote control unit and this unit, or if the remote control unit is not directed towards the remote sensor of the main unit at the correct angle.
- The remote control unit may not work properly if strong light such as direct sunlight or fluorescent light is shining onto the main unit's remote sensor.
- The remote control unit may not work properly when this unit is used near devices emitting infrared rays, or when remote control units of other devices which use infrared rays are used.
  On the other hand, the use of this remote control unit may cause other devices to work improperly.
- When the operating range of this remote control unit becomes too short, replace the batteries.

Operating the remote control unit

By connecting a control cord (optional), other PIONEER products can be operated using this remote control unit. Point the remote control unit towards the remote sensor of this unit and operate.
The remote control signals are received by the remote sensor of this unit, and sent to the other devices via the CONTROL OUT terminal. By reading other manufacturers' preset codes or memorizing (learning) the remote control signals of other equipment in this remote control unit, other manufacturers' equipment can also be operated using this remote control unit.

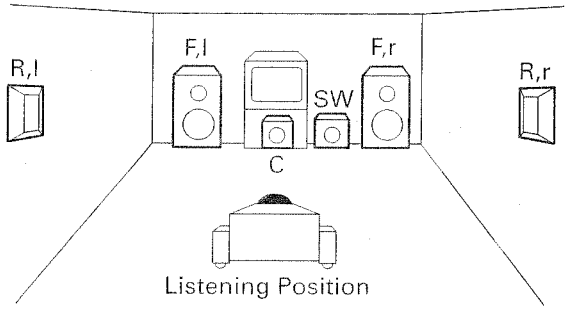


INSTALLATION

Installing speakers

To achieve the best surround effects, install speakers as shown in the following figure.

Installation Example



* In the above figure, F stands for front speakers, R for rear speakers, C for center speakers, SW for sub woofer, r for right, and l for left.

memo

- If installing the rear speakers far away from the front and center speakers, surround effects cannot be fully achieved.
- Installing speakers near the TV may cause interference such as the TV color to change. In such cases, use magnetically shielded speakers or install the speakers away from the TV.
- Install the left and right speakers at equal distance from the TV.
- Install the center speaker at the top, bottom, or behind the TV so that TV sound and images match.
- It is recommended to install the rear speakers slightly above ear level.

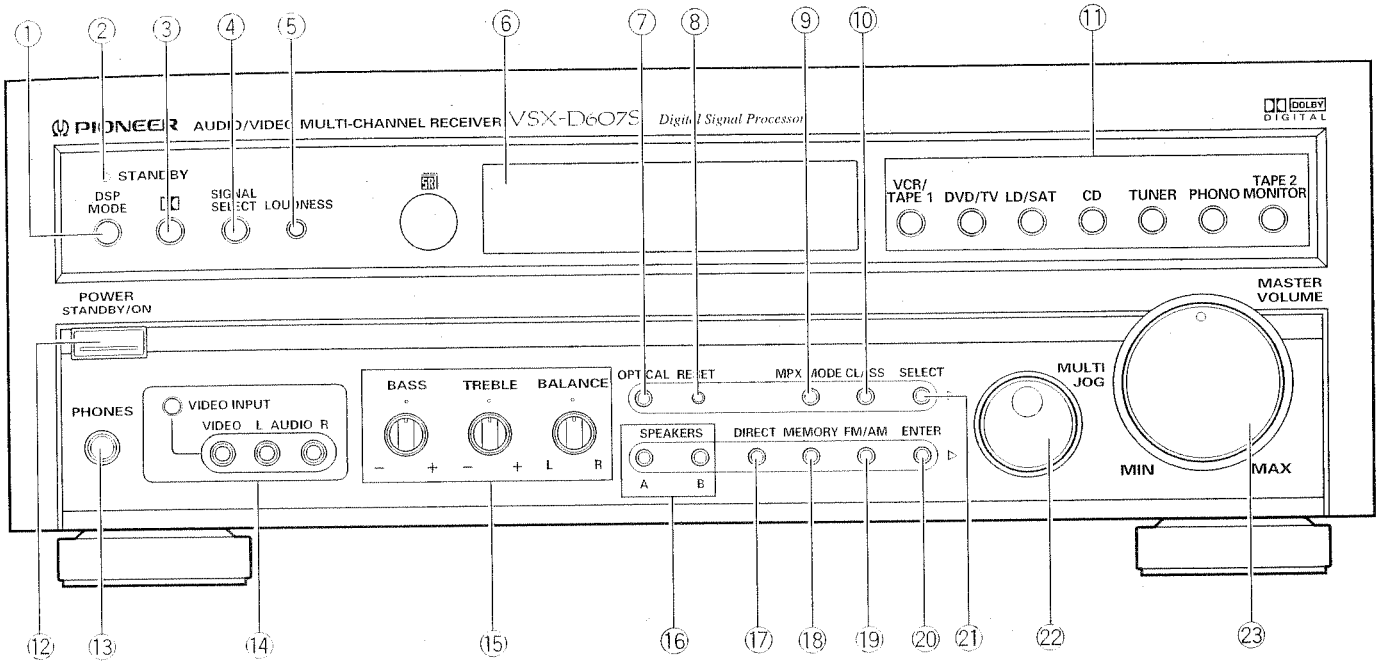
Installing a cassette deck

The cassette deck may produce noise when played back depending on the place of installation.
The noise is due to the effects of leakage flux caused by the transformer of the receiver.
In such cases, change the place of installation or install it away from the receiver.

NAMES OF PARTS

* The size of characters shown in the figure may differ from that on the actual product.

Front panel



① **DSP MODE button (P.18)**

② **STANDBY indicator**

③ **DD button (P.19)**

④ **SIGNAL SELECT button (P.16)**

⑤ **LOUDNESS button**
Press this button when the volume is low to raise the low and high range levels so that the sound can be heard more easily.

⑥ **Display**

⑦ **OPTICAL button (P.17)**

⑧ **RESET button (P.46)**

⑨ **MPX MODE button**
Use to switch the auto stereo/monaural mode for receiving FM broadcasts. When the received broadcast signal is weak, press this button to set the monaural mode.

⑩ **CLASS button (P.23)**

⑪ **Function buttons (P.21~)**

⑫ **POWER STANDBY/ON button**

⑬ **PHONES jack (Headphone terminal)**

⑭ **VIDEO INPUT button/terminal (P.13)**
Connect to a video camera, etc.

⑮ **TONE and BALANCE controls**
Use to adjust tone and balance.

⑯ **SPEAKERS A, B buttons**
ON/OFF switches for the A and B speaker systems.

⑰ **DIRECT button**
Use to play back sound without going through the tone and balance control circuits. DOLBY SURROUND MODE, DSP MODE and LOUDNESS also turn off.

⑱ **MEMORY button (P.23)**

⑲ **FM/AM button (P.22)**
Use to switch the FM/AM frequency band reception.

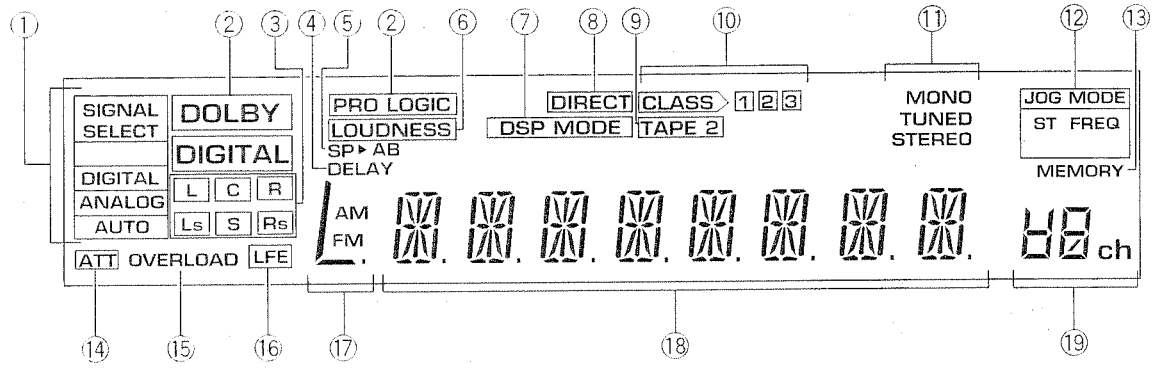
⑳ **ENTER button (P.23)**

㉑ **SELECT button (P.22)**
Use to switch the control of the MULTI JOG between station mode and frequency mode when operating the tuner.

㉒ **MULTI JOG (P.22~)**
Use to select the frequency and station number when operating the tuner.

㉓ **MASTER VOLUME**

Display



① **SIGNAL SELECT indicators**
The input signal format currently selected will light.

② **DOLBY DIGITAL and PRO LOGIC indicators**
"DOLBY" lights when the Dolby Surround mode is ON. There are two Dolby Surround modes-Dolby Digital (AC-3) and Dolby Pro Logic. "DOLBY" and "DIGITAL" light during Dolby Digital, and "DOLBY" and "PRO LOGIC" light when played back in Dolby Pro Logic.

③ **PROGRAM FORMAT indicators**
When playing back in the Dolby Digital (AC-3) mode, the indicator of the channel set for the playback source lights.

④ **DELAY indicator**
Lights when the delay time is being set.

⑤ **Speakers A, B indicator**
The indicator of the speaker system (A, B) selected will light.

⑥ **LOUDNESS indicator**
Lights when LOUDNESS is ON.

⑦ **DSP MODE indicator**
Lights when DSP MODE is selected.

⑧ **DIRECT indicator**
Lights when DIRECT is ON.

⑨ **TAPE 2 indicator**
Lights when TAPE 2 MONITOR is ON.

⑩ **CLASS 1, 2, 3 indicators**
The indicator of the class number selected lights.

⑪ **TUNER indicator**

MONO:
Lights when the monaural mode is set using the MPX MODE button.

TUNED:
Lights when broadcasts are being received.

STEREO:
Lights when stereo broadcasts are received during auto stereo mode.

⑫ **JOG MODE indicator**

ST:
Lights when the station mode is selected.

FREQ:
Lights when the frequency mode is selected.

⑬ **MEMORY indicator**
Lights when station memory is selected.

⑭ **ATT indicator**
Lights when INPUT ATT is ON.

⑮ **OVERLOAD indicator**
Lights if the input level is excessive when ANALOG is selected (including AUTO) using the SIGNAL SELECT button.

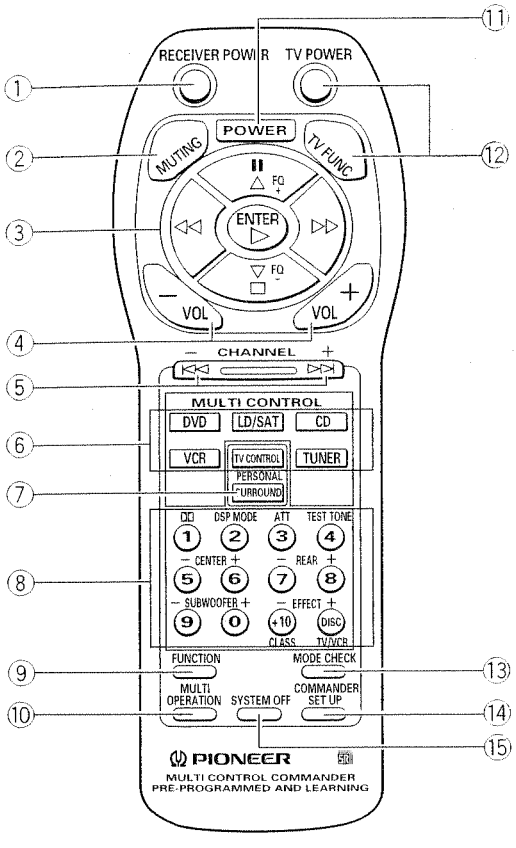
⑯ **LFE indicator**
"LFE" lights when the LFE (Low Frequency Effects) channel is set for the playback source with Dolby Digital. The LFE indicator also lights when LFE signals are input.

⑰ **AM/FM indicators**
The indicator of the band currently selected (AM/FM) lights.

⑱ **CHARACTER display**

⑲ **STATION display**
Indicates the station number currently selected.

Remote control unit



① **RECEIVER POWER button**

② **MUTING button**

Press to mute the volume.

③ **[When set to SURROUND (OPERATIONS)]**

△,▽,◁,▷ (Select/Adjust) and ENTER buttons

[When set to other than SURROUND (OPERATIONS)]

⏸(Pause), □ (Stop), ◁◁(Rewind), ▷▷(Fast Forward), ▷ (Play) buttons

④ **VOL (–, +) buttons**

⑤ **[TV Operations]**

Selects the TV broadcast channel.

[CD, LD, DVD operations]

⏮, ⏭ (Chapter/Track Search) buttons

⑥ **MULTI CONTROL function buttons**

Use to set and operate MULTI CONTROL, and switch the function.

TV CONTROL: Press to operate the TV.

⑦ **SURROUND/PERSONAL button**

[When setting MULTI operations]

Press when setting the personal mode using multi operations.

[When setting to other than MULTI operations]

Press when performing surround operations and setting/changing setting modes.

⑧ **Number/surround setting buttons**

[When setting surround (operations)]

DD : Turns the Dolby Surround mode ON/OFF.

DSP MODE: Switches the surround effects.

ATT: If turned ON when the sound is unstable due to excessive input levels, the input signal level drops so that the sound becomes clearer.

TEST TONE: When turned ON (while in surround mode), volume balance adjustment signals are output in order from the speakers and can be adjusted.

CENTER –, +: Adjusts the center level.

REAR –, +: Adjusts the rear level.

SUB WOOFER –, +: Adjusts the sub woofer level.

EFFECT –, +: Adjusts DSP effects.

[Tuner Operations]

Number buttons: Use for setting the frequency value when station call is selected or during direct access.

CLASS: Switches the CLASS number.

[VCR Operations]

TV/VCR: Switches between TV/VCR.

[CD Operations]

DISC: Use to select the DISC number.

⑨ **FUNCTION button**

Switches the function.

⑩ **MULTI OPERATION button**

Use to set multi operations.

⑪ **POWER button**

Turns ON/OFF the power of devices other than this unit.

⑫ **TV buttons (P.30)**

⑬ **MODE CHECK button (P.30)**

⑭ **COMMANDER SET UP button**

Use to control and learn operations of other manufacturers' equipment, and set multi operation functions.

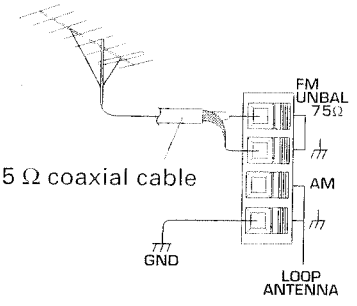
⑮ **SYSTEM OFF button (P.43)**

Use to turn OFF the power of all equipment connected to the main unit.

CONNECTING DEVICES

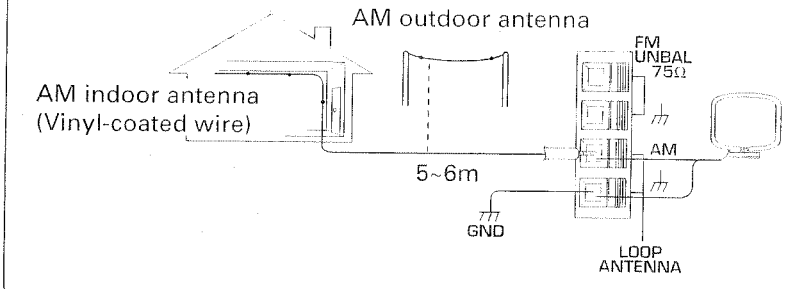
When connecting or changing equipment, be sure to turn OFF the POWER switch, and disconnect the power cord from the wall outlet.

■ For better reception of signals, use an FM external antenna.

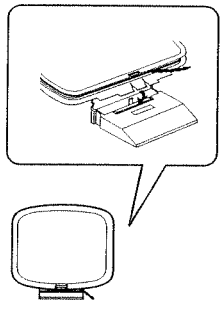


■ When AM broadcast reception is poor

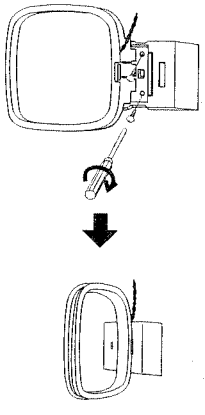
Connect a 5 to 6 meter long vinyl-coated wire to the AM antenna. If possible, draw horizontally outdoors to achieve better reception.



■ Assembling the AM loop antenna



When attached onto a wall, etc.



Face towards the direction with the best reception.

Stretch out the antenna fully and secure onto a wall using pins.

FM antenna

VCR

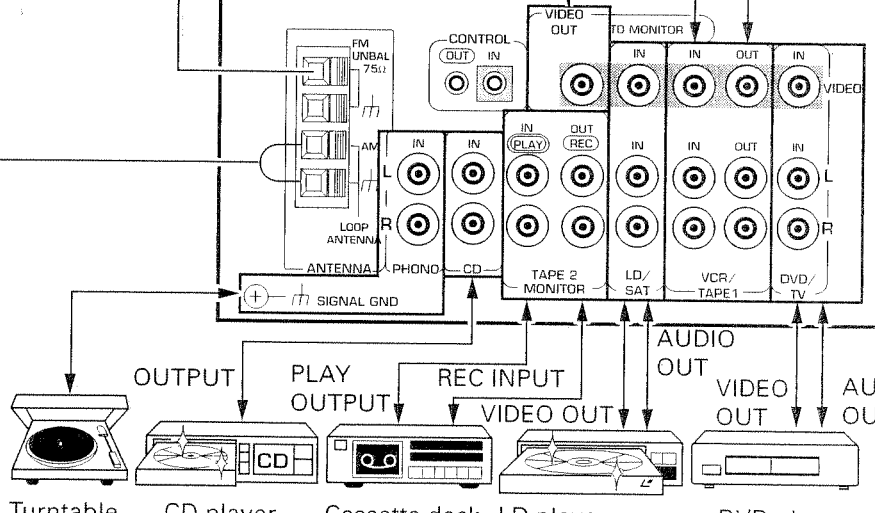
TV monitor

* Can also be connected to a cassette deck.

VIDEO IN

AUDIO/ VIDEO OUT

AUDIO/ VIDEO IN



OUTPUT

PLAY OUTPUT

REC INPUT

VIDEO OUT

AUDIO OUT

VIDEO OUT

AUDIO OUT

Turntable

CD player

Cassette deck

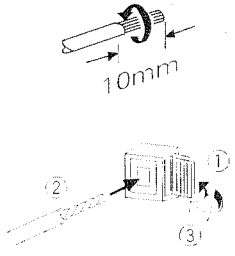
LD player

* Can also be connected to a satellite system.

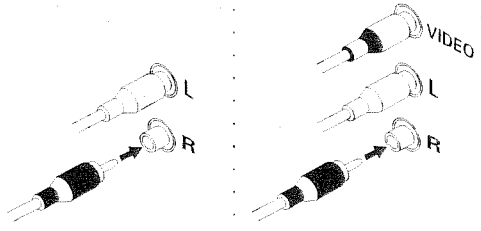
DVD player

* Refer to pages 14 and 15 for how to connect the LD player and DVD player.

■ Antenna terminal

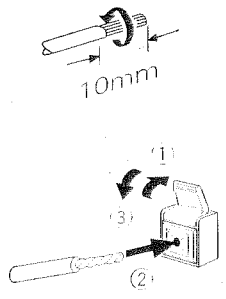


■ Input/output plug

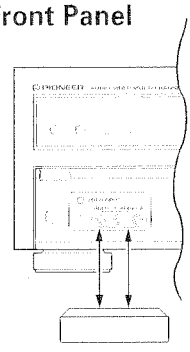


Connect the white plug to L, red plug to R, and yellow plug to VIDEO. Be sure to insert completely.

■ Speaker terminal

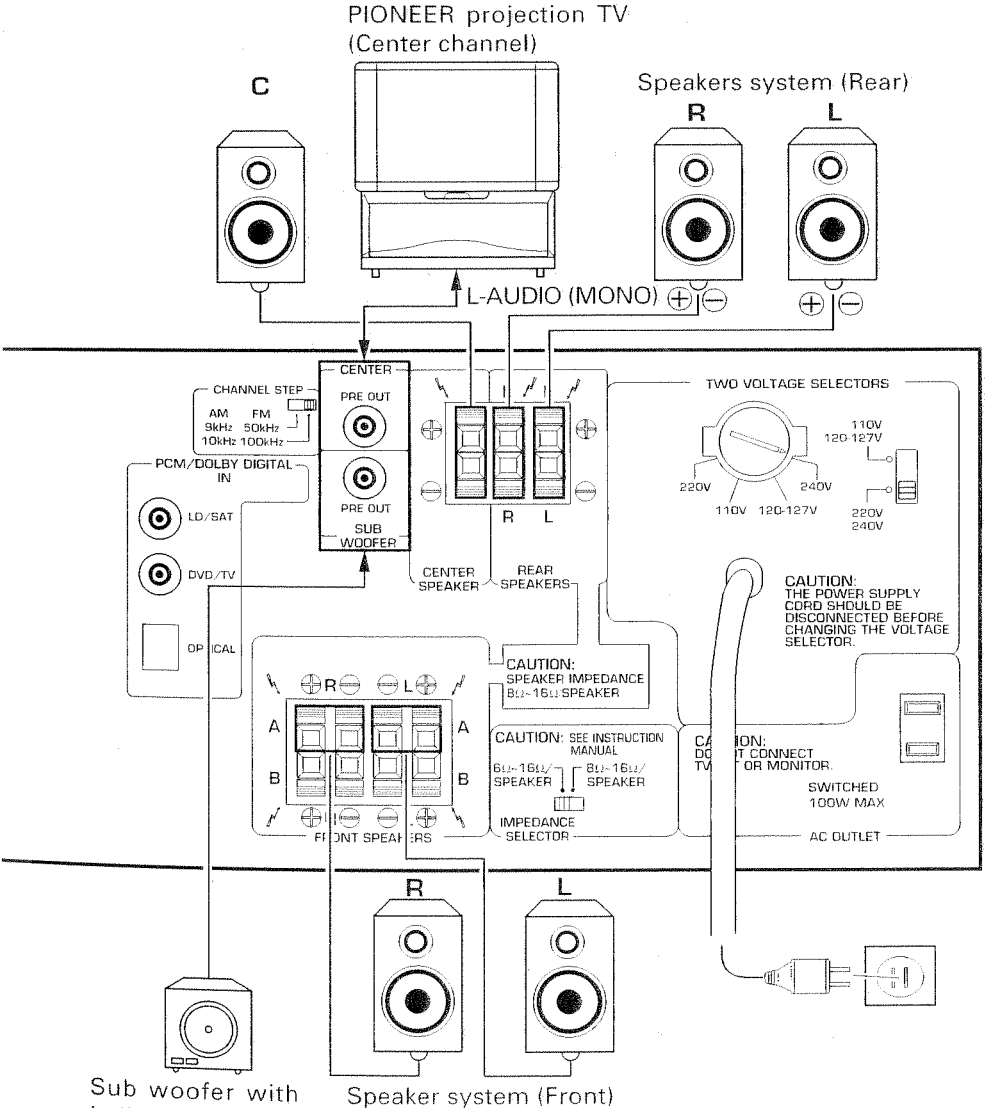


■ Front Panel



Connect to equipment such as a video camera, etc.

* The size of characters and terminal positions in the figures may differ from those on the actual product.



Sub woofer with built-in amplifier

Speaker system (Front)

* The sub woofer can be connected in a different way. For details, refer to the instructions on the sub woofer.

AC OUTLET

[SWITCHED 100 W MAX]

Power supplied through this outlet is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 100 W.

memo

- This unit should be disconnected by removing the power plug from the wall socket when not in regular use, e.g., when on vacation.
- Do not connect appliances with high power consumption such as heaters, irons, or television sets to this AC OUTLET in order to avoid overheating and fire risk. This can also cause the receiver to malfunction.

CAUTION:
DO NOT CONNECT A MONITOR OR TV SET TO THIS UNIT'S AC OUTLET.

memo

Use nominal impedances such as 6 Ω to 16 Ω or 8 Ω to 16 Ω for the speaker system. When using 6 Ω to 16 Ω, switch the IMPEDANCE SELECTOR to 6 Ω to 16 Ω.

Connection of digital input terminal

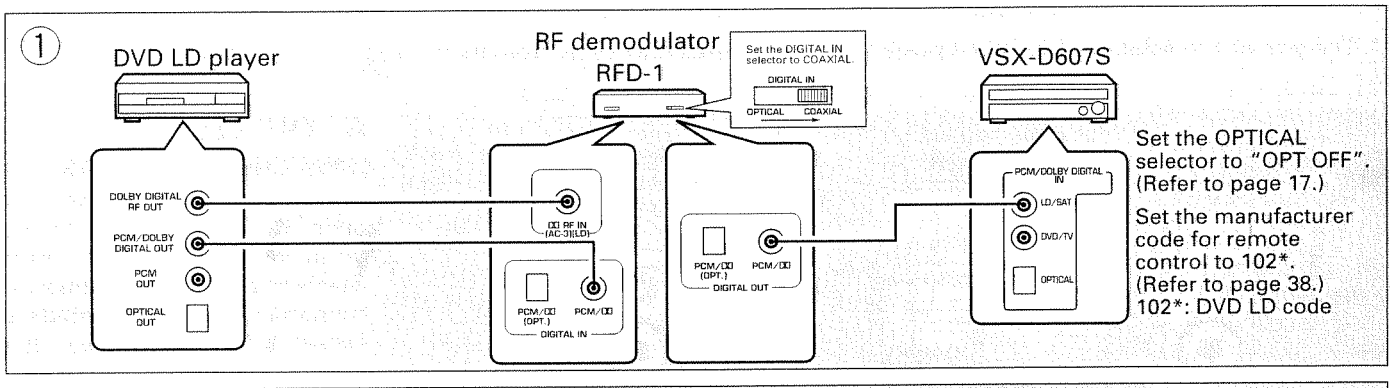
Some DVDs and LDs have output terminals for the digital signal *1 and AC-3 RF signal *2 in addition to the analog signal. The method of connecting the digital input terminals differs according to the output signals of the equipment and the demodulator used. After connecting, set the signal input of this unit. (Refer to page 17.)

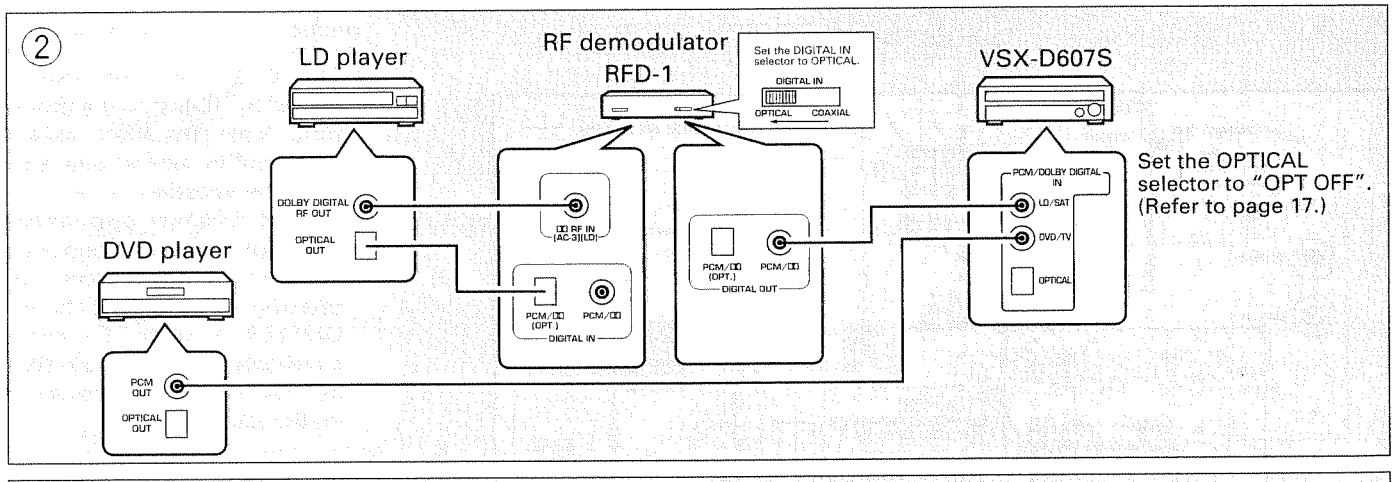
*1 Digital signal: Signals recorded on a CD, DVD, or LD (recorded with digital audio signals). Connect to the digital input terminal (PCM/DOLBY DIGITAL IN) of this unit.

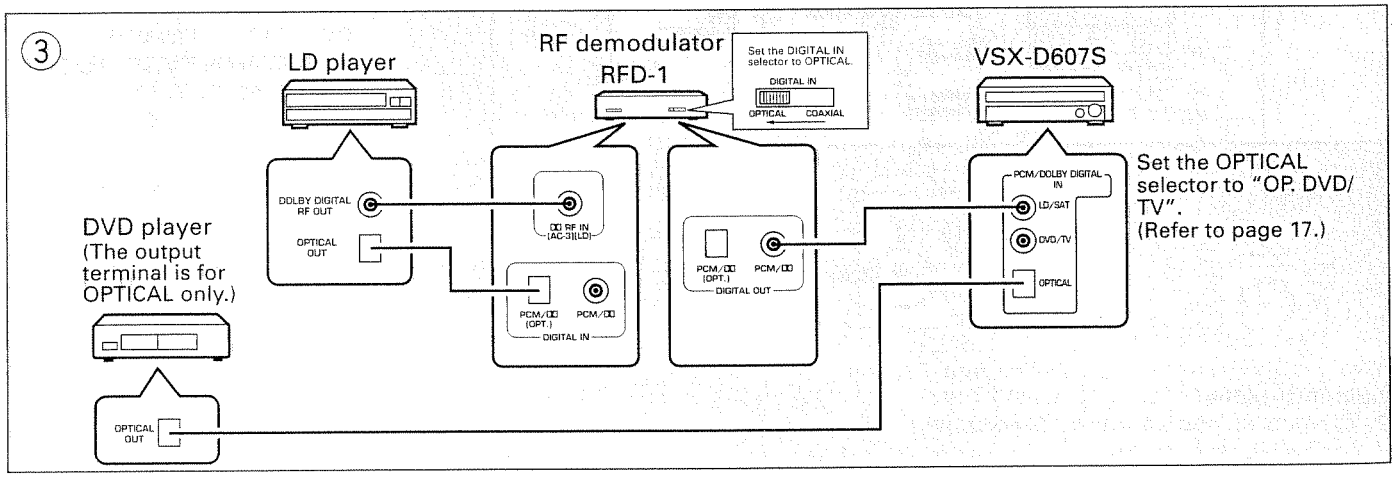
*2 AC-3 RF signal: Signals recorded only on a Dolby Digital LD. The digital signal must be supplied to this unit via the demodulator because the recording method is different. (LD bearing the DOLBY SURROUND AC-3 DIGITAL or DOLBY DIGITAL mark only.)

Example of Connection Using a Demodulator

When using the PIONEER RFD-1

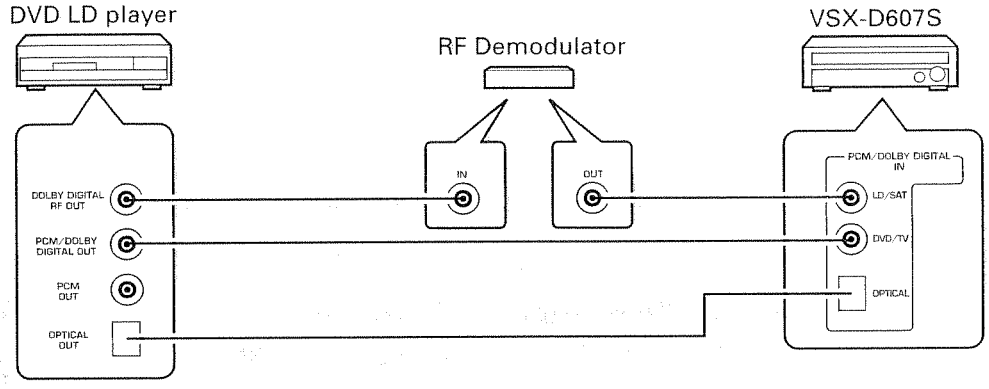






When using other than Pioneer RF demodulator

①

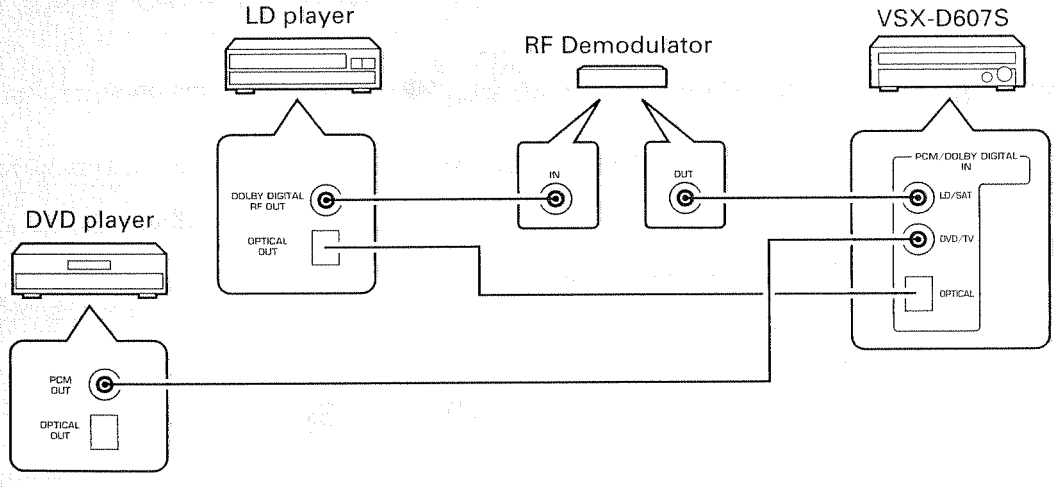


Connect the DVD LD player's VIDEO output terminals to the receiver's both of LD/SAT and DVD/TV VIDEO IN terminals.

When play back the Dolby Digital audio of the LD, set the OPTICAL selector to "OPT OFF". When play back the others, set the OPTICAL selector to "OP. LD/SAT".
(Refer to page 17.)

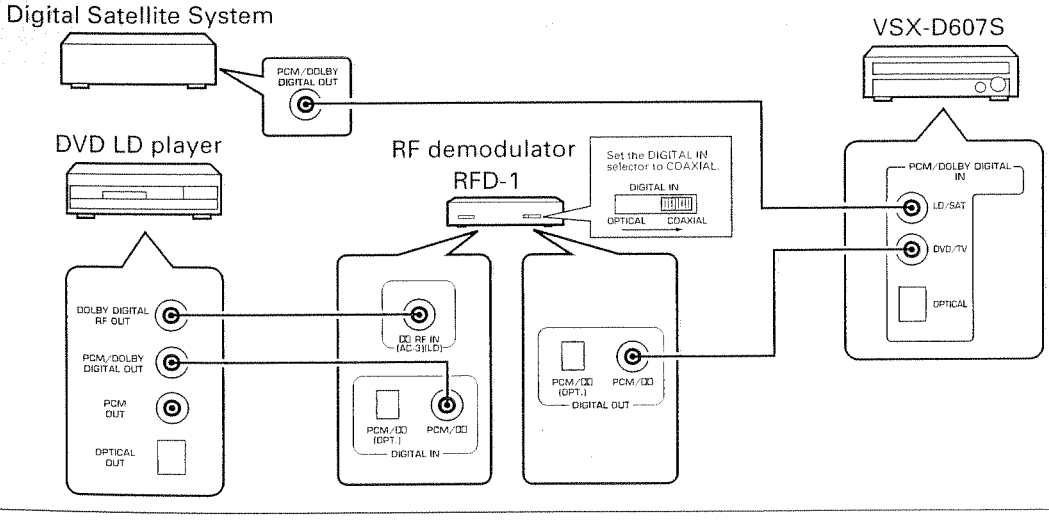
Set the manufacturer code for remote control to 102*.
(Refer to page 38.)
102*: DVD LD code

②



When play back the Dolby Digital audio of the LD, set the OPTICAL selector to "OPT OFF". When play back the others, set the OPTICAL selector to "OP. LD/SAT".
(Refer to page 17.)

Other Examples of Connections



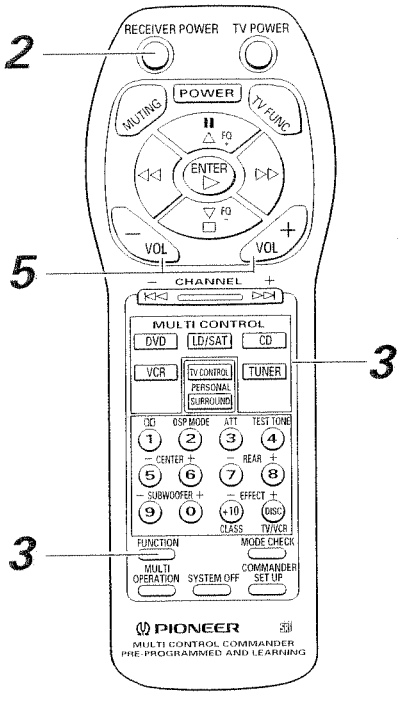
Set the OPTICAL selector to "OPT OFF".
(Refer to page 17.)

3. BASIC OPERATIONS

It is recommended that the speakers be set using the "SETTING MODE" on page 31 before beginning operations.
The speakers need to be set to properly obtain the full surround effects of this unit.

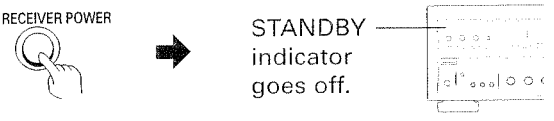
SWITCHING THE INPUT SIGNAL

Select the source to be played

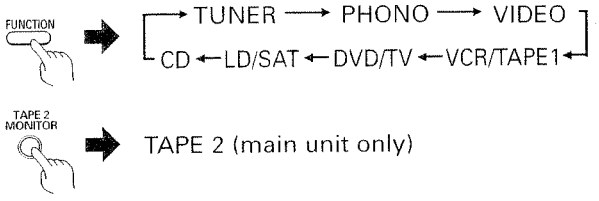


1. **Turn ON the power of the equipment to be played.**
* Set the input selector of the TV monitor to the source input from this unit.

2. **Turn ON the power of the receiver.**



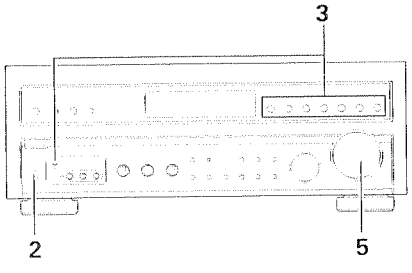
3. **Select the source to be played.**



* Except for PHONO, VIDEO and TAPE 2, the sources can directly be selected using MULTI-CONTROL.

4. **Play back the source.**

5. **Adjust the volume.**



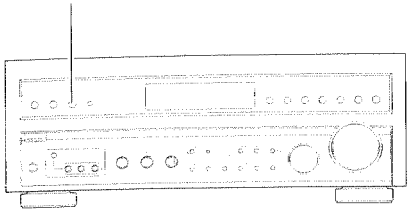
■ Operating with the main unit

1. Turn ON the power of the equipment to be played.
2. Press the POWER button.
3. Press the function button and select the source to be played.
4. Play back the source.
5. Adjust the volume.

Select the digital or analog input signal

The functions DVD and LD have digital input terminals and an analog input terminal. When the input terminals are connected to a DVD player and LD player's output terminals, several input signals will be sent from each player. Use the SIGNAL SELECT button to select the input signal. Normally when set to "AUTO", the SIGNAL SELECT mode will automatically change to the best signal choice.

SIGNAL SELECT



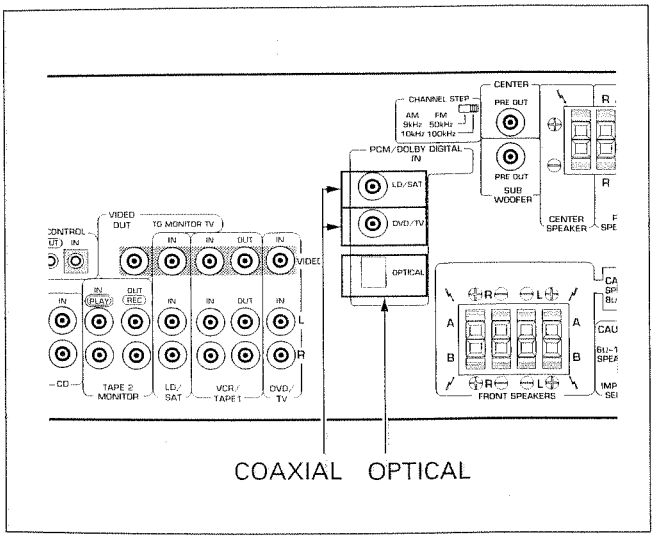
Switch according to the input signal format.

AUTO → ANALOG → DIGITAL → AUTO

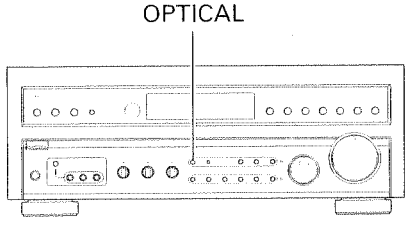
memo

- When set to "DIGITAL" or when digital signals are set to "AUTO", the signal set by the OPTICAL button will have priority. (Refer to page 17.)
- The digital signals have priority over analog signals if both signals are present in the playback source when the system is set to "AUTO".
- When selecting functions other than DVD and LD, SIGNAL SELECT will be set to "ANALOG".

Switching PCM/DOLBY DIGITAL input (OPTICAL button)

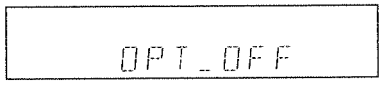


There are three types of DIGITAL input terminals for this unit-two COAXIAL (both LD and DVD).
When only the OPTICAL terminal is available as a DIGITAL output terminal for an LD or DVD player, connect the DIGITAL OUT (OPTICAL) terminal of the player to the OPTICAL terminal of this unit.
Then set the OPTICAL terminal using the OPTICAL button (as shown below). In this case, the COAXIAL terminals will not function.

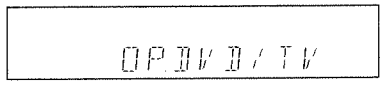


Set to use as an input terminal for either the LD/SAT or DVD/TV function.

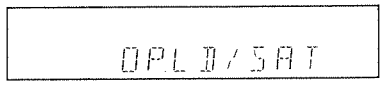
OPTICAL OFF
The OPTICAL is not used for a DIGITAL input terminal.



OPTICAL DVD/TV
Set the OPTICAL as a DIGITAL input terminal for DVD or TV.



OPTICAL LD/SAT
Set the OPTICAL as a DIGITAL input terminal for LD or SAT.



memo

Initially, the OPTICAL terminal is set to OFF.

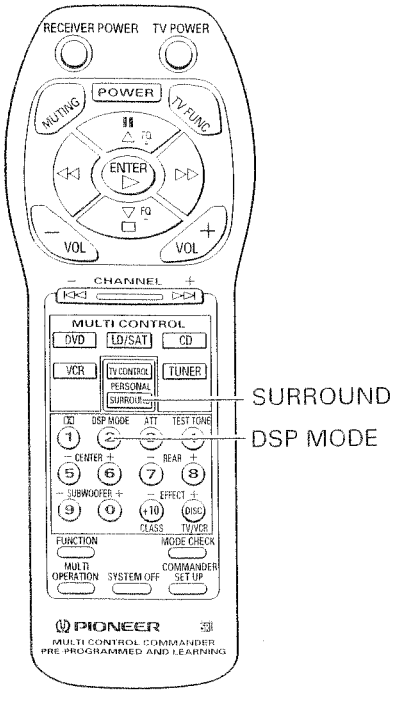
ENJOYING SURROUND EFFECTS

memo

- Turn ON SPEAKER A before operating.
- Even if both SPEAKERS A and B are turned ON, SPEAKERS B is turned off automatically.
- If SPEAKER B is ON, the surround mode will not be set.

Select the SURROUND button to enable surround operations.

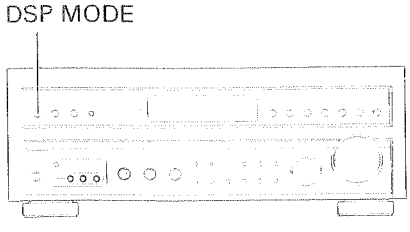
Switching the sound effects [DSP MODE]



Select the surround effects.

HALL → JAZZ → DANCE
OFF ← THEATER 2 ← THEATER 1

Refer to page 44 for the characteristics of the surround effects.



■ Operating with the main unit

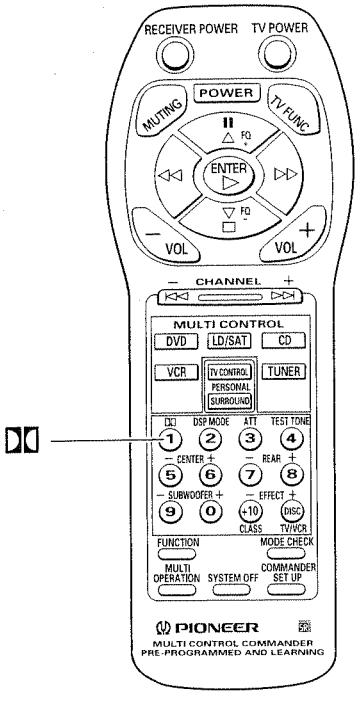
Press the DSP MODE button.

Each time it is pressed, the surround effects change as follows.

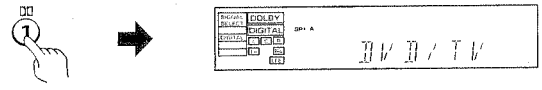
HALL → JAZZ → DANCE
OFF ← THEATER 2 ← THEATER 1

Switching the Dolby Surround Mode

When the Dolby Surround mode is ON, Dolby Pro Logic Surround and Dolby Digital (AC-3) are automatically switched according to the input signal, and playback is performed.



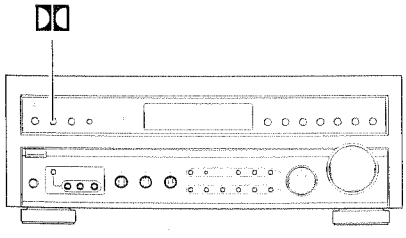
Set to the desired Dolby Surround mode.



Each time it is pressed, the mode is turned ON/OFF.

memo

When connecting a LD player or DVD player with the AC-3 RF output as shown in the figure on pages 14 and 15, and playing back an LD or DVD disc in DOLBY DIGITAL, the unit is switched to Dolby Digital (AC-3) automatically.

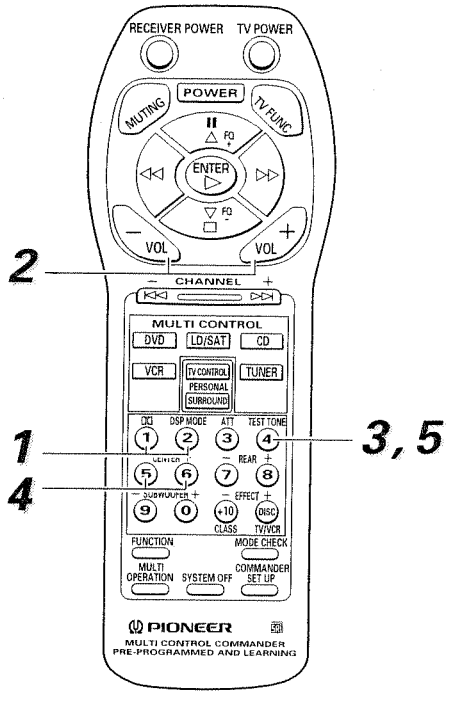


■ Operating with the main unit

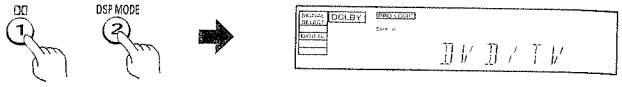
Press the button.

The mode is turned ON/OFF each time it is pressed.

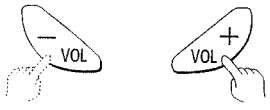
Enjoying movie and music sources in surround mode



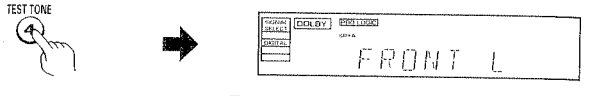
1. **Select the Dolby Surround mode and DSP mode (either mode can be set independently).**



2. **Adjust to the desired volume.**



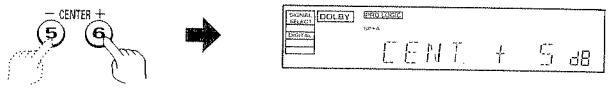
3. **Set the test tone.**



Front L → Center → Front R
Sub woofer ← Rear L ← Rear R

4. **Adjust the center level, rear level, rear balance and sub woofer level so that the test tone volume output from each speaker is the same.**

- Level can be set for each surround mode.
- When both the DSP mode and Dolby Surround mode are turned ON, priority is given to the Dolby Surround mode.



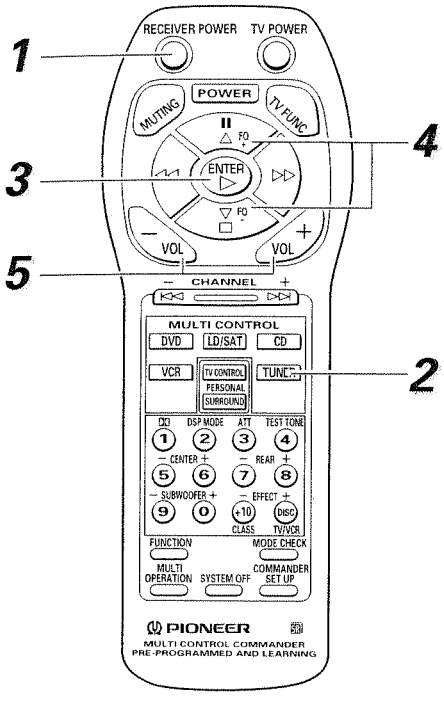
5. **Turn OFF the test tone.**

6. **Play the desired source.**

memo

- This operation need not be performed each time the Dolby Surround mode and DSP mode are turned ON.
- Although the test tone is output independently for the Lch and Rch of the rear speakers, the Lch and Rch are operated together when adjusting the rear level. If there is a difference between the Lch and Rch, adjust it based on "9 Rear balance setting mode" on page 35.
- The effect level enables the reverb to be adjusted to 9 levels. When set to a high level, the reverb increases, reproducing Hall-like effects.

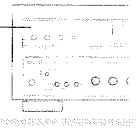
LISTENING TO FM/AM BROADCASTS



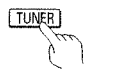
memo Turn OFF TAPE 2 MONITOR (the Indicator goes off).

1. **Turn ON the power of the receiver.**

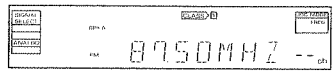
→ STANDBY indicator goes off.



2. **Set the TUNER function.**

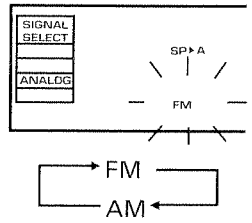


→

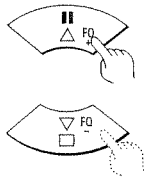


3. **Select the band (FM or AM).**

→

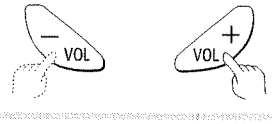


4. **Select the broadcast station.**



→ Refer to "Selecting broadcast stations" below.

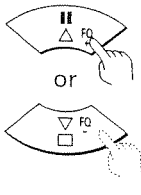
5. **Adjust the volume.**



Selecting broadcast stations

(For example, when selecting an FM broadcast in 0.1 MHz steps)

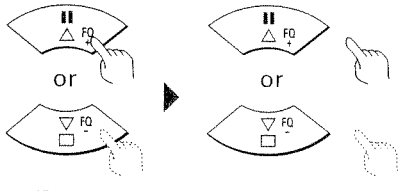
① Selecting step by step.



Press lightly and release.

87.50
87.60
87.70
⋮

② Selecting automatically.

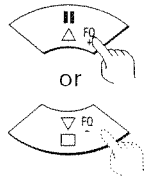


(Press and hold for approx. 1 second, then release)

87.50
↓
89.50

Stops when received.

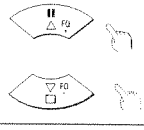
③ Selecting at high speed.

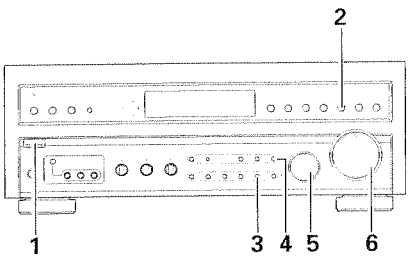


Press continuously

87.50
87.60
⋮
89.50

↓ Stops when released.





■ Selecting a broadcast station using the main unit

1. **Press the POWER button.**
2. **Set the TUNER function.**
3. **Press the FM/AM button and select an FM or AM broadcast.**
4. **Press the SELECT button to set the frequency mode.**
   FREQ indicator lights.
5. **Rotate the MULTI-JOG and adjust to the desired broadcast station.**
   The TUNED indicator lights when a broadcast program is received.
6. **Adjust the volume.**

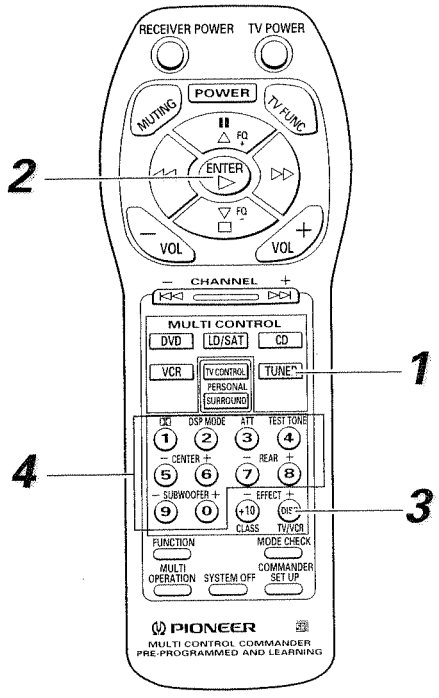
memo

- The TUNED indicator will not light when a broadcast station is too far away or when the broadcasting signal is weak.
- The MULTI JOG cannot be used in "Selecting broadcast stations ② Selecting automatically" on page 21.

Directly inputting the frequency [Direct Access (remote control unit only)]

A broadcast station (frequency) can be directly selected using the number buttons on the remote control unit.

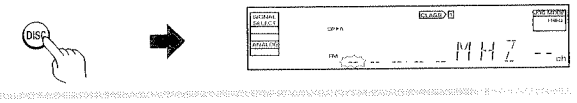
memo Turn OFF the TAPE 2 MONITOR (the indicator goes off).



1. **Set the TUNER function.**

2. **Select the band (FM or AM).**

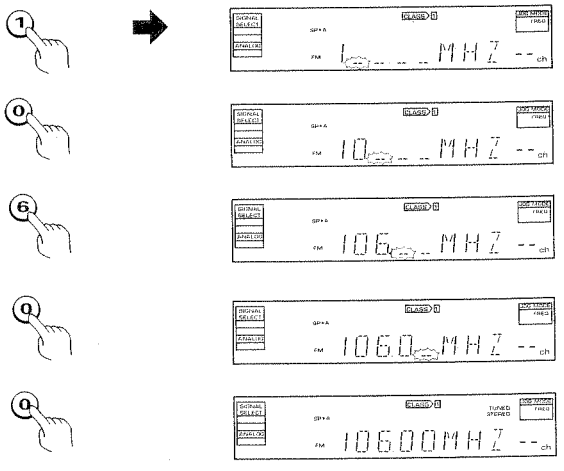
3. **Set the direct access mode.**



4. **Select the broadcast station.**

Press the numbers of the frequency to be received in order.

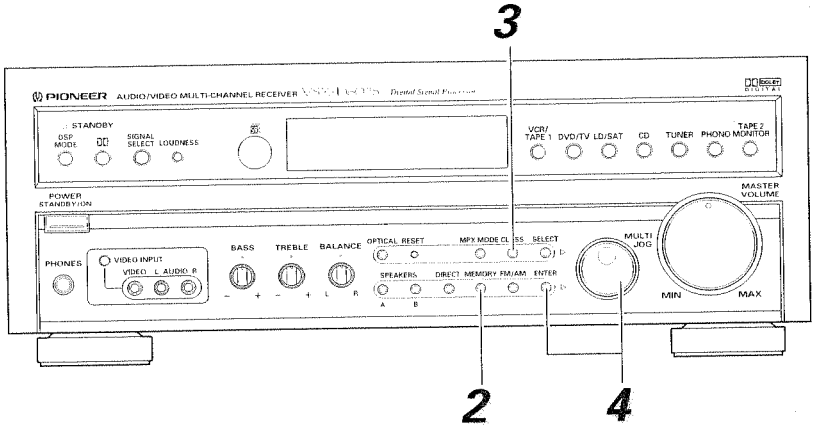
For example, to receive FM 106.00 MHz.



■ Canceling the frequency input

The frequency input can be canceled by pressing the DISC button again. Input the frequency again correctly.

Memorizing frequently used stations (main unit only)



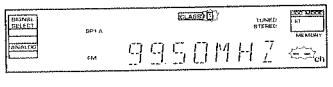
memo
- The frequency received and MPX MODE (FM only) can be memorized.
- Up to 10 stations can be memorized in each of three classes.

1. **Receive the desired station.** ➡ Refer to "Listening to FM/AM Stations" (Pages 21 and 22).

2. **Set the MEMORY mode.**

MEMORY

➡

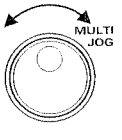


3. **Select the desired class number.**

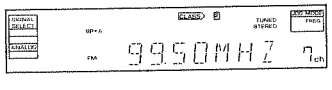
CLASS

➡ CLASS 1 ⟶ CLASS 2 ⟶ CLASS 3 ⟶ CLASS 1

4. **Select the desired station number.**



➡

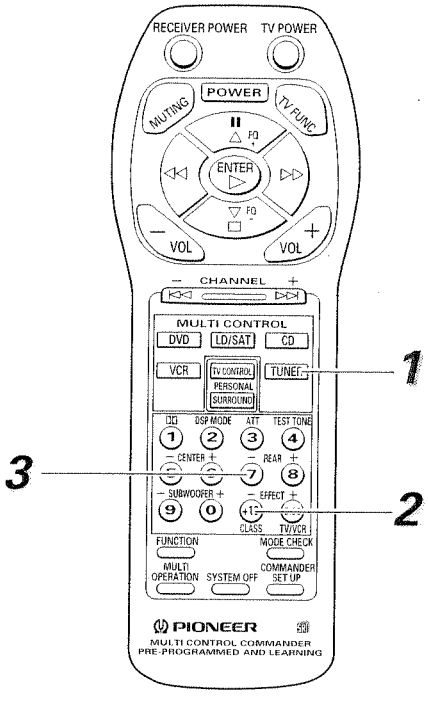


Rotate the MULTI JOG to select the station number and press the ENTER button to memorize the selection. (Even if ENTER is not pressed, the selection will be automatically memorized in 5 seconds.)

CLASS 1(1 ⟷ 10ch) ⟶ CLASS 2(1 ⟷ 10ch) ⟶ CLASS 3(1 ⟷ 10ch) ⟶ CLASS 1

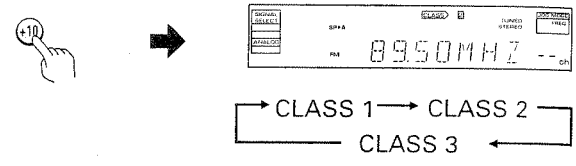
Repeat steps 1 to 4 to memorize up to 30 stations.

Listening to Memorized Stations

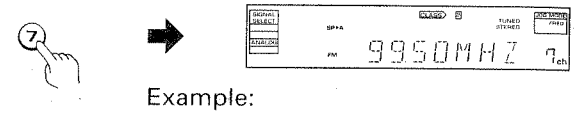


1. **Set the TUNER function.**

2. **Select the CLASS number in which the desired station is memorized.**



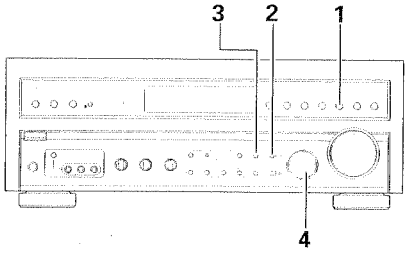
3. **Select the station number of the desired station.**



Example:
When FM99.50 MHz has been memorized in channel 7 of CLASS 2.

memo

Use the CHANNEL +/– buttons to select other memorized station numbers.



■ Operating with the main unit

1. **Press the TUNER button.**
2. **Press the SELECT button to set the station mode.**
   The ST indicator lights.
3. **Press the CLASS button, and select the CLASS number in which the desired station has been memorized.**
4. **Rotate the MULTI-JOG, and select the desired station number which has been memorized.**

memo

When the power cord of the unit is disconnected from the wall outlet for several days, the stations memorized will be erased.

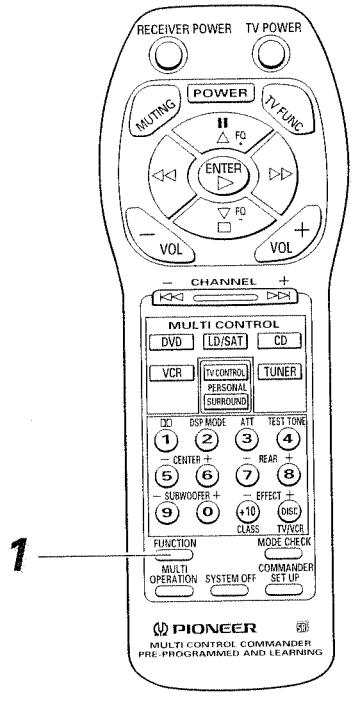
■ Last Station Memory

By turning ON the power and setting TUNER, the station set before the power was last turned OFF will be received.

RECORDING

Set the format of the input signal to "ANALOG" referring to "Select the digital or analog input signal" on page 17.

Recording with TAPE 1 or TAPE 2



memo

Turn ON the power of all equipment to be used.

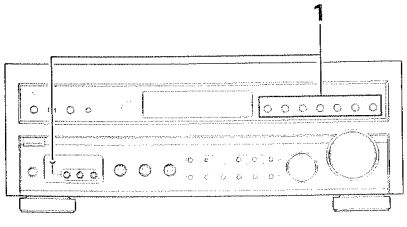
1. Select the source to be recorded.

* Except for PHONO and VIDEO, the sources can directly be selected using MULTI CONTROL.

FUNCTION → TUNER → PHONO → VIDEO → CD ← LD/SAT ← DVD/TV ← VCR/TAPE 1

2. Start recording with TAPE 1 or TAPE 2.

3. Play back the source to be recorded.



■ Operating with the main unit

1. Select the source to be recorded using the Function buttons.
2. Start recording with TAPE 1 or TAPE 2.
3. Play back the source to be recorded.

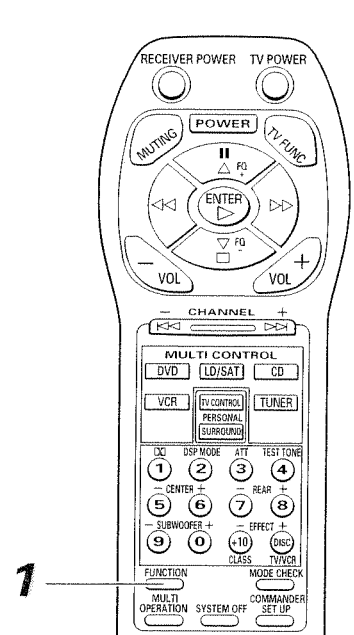
memo

- The VCR/TAPE 1 sounds cannot be recorded with TAPE 1.
- The volume, tone, balance, and surround settings of this unit have no effect on the recording signal.

■ Recording Monitor

When recording with TAPE 2, if the connected recording device has a recording monitor function, turning ON the TAPE 2 MONITOR button will enable recording to be carried out simultaneously with playback monitoring (the TAPE 2 indicator lights).

Recording with a VCR



1. **Select the source to be recorded.**

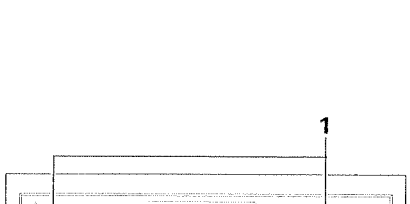
FUNCTION → (TUNER) → (PHONO) → VIDEO → (VCR/TAPE 1) ← DVD/TV ← LD/SAT ← (CD)

2. **Start recording with a VCR.**

3. **Play back the source to be recorded.**

memo

The signal from VCR/TAPE 1 cannot be recorded.



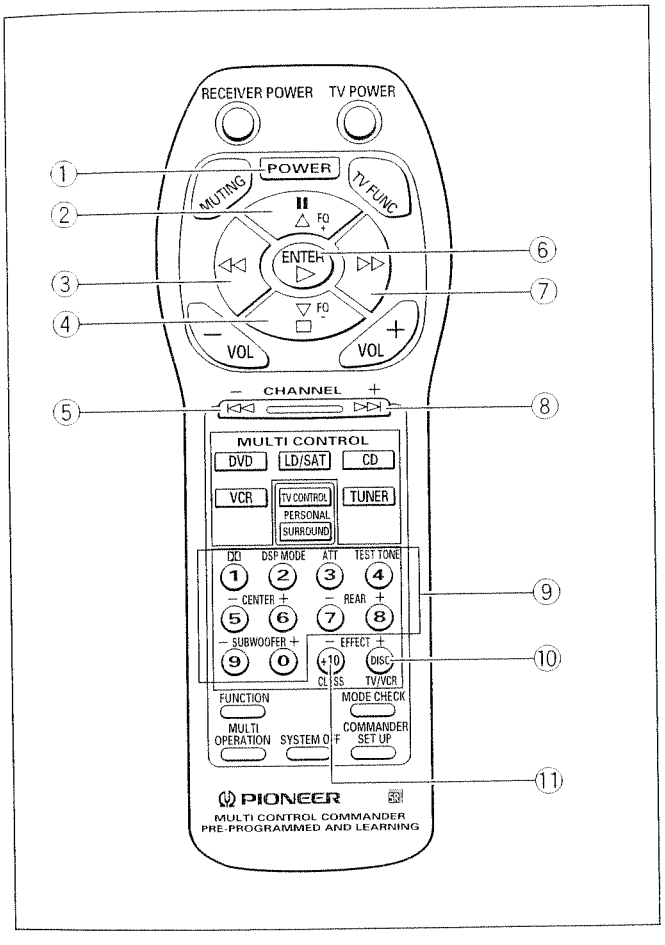
■ Operating with the main unit

1. Select the source to be recorded using the Function buttons.
2. Start recording with a VCR.
3. Play back the source to be recorded.

memo

The volume, tone, balance, and surround settings of this unit have no effect on the recording signal.

OPERATING OTHER COMPONENTS



LD PLAYER/DVD PLAYER operation

Press the MODE CHECK button to light the LD/SAT button or DVD button, and operate as desired using the following buttons.

① POWER

Use to turn ON/OFF the LD player or DVD player.

② II

Use to pause. (With some players, pressing this button may set still pictures.)

③ ◄◄

Continuously pressing this button will set fast reverse playback.

④ ■

Pressing this button during playback will stop the unit. (With some LD players, the disc table may come out if pressed during stop.)

⑤ I◄◄

Pressing and releasing this button immediately returns playback to the beginning of the chapter (track) currently being played. Pressing it continuously returns playback to the beginning of a previous chapter (track).

⑥ ►

Starts playback.

⑦ ►►

Pressing this button continuously will start fast forward playback.

⑧ ►►I

Pressing and releasing this button immediately advances playback to the beginning of the next chapter (track). Pressing it continuously advances playback to the beginning of a future chapter (track).

⑨ Number buttons

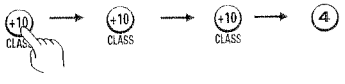
Use to select the chapter (track).

⑩ (DISC) (SIDE A/B for LD) (MENU for DVD)

LD: Switches between sides A and B of the disc.
DVD: Turns ON/OFF the menu screen.

⑪ +10 button

Use to select chapter (track) numbers higher than 10.
Example: Chapter (track) 34



SAT (Satellite Tuner) operation

Press the MODE CHECK button to light the LD/SAT button, and operate as desired using the following buttons.

① POWER

Use to turn ON/OFF the power of the satellite broadcast tuner.

②▲,③◄,④▼,⑦►

Serve as cursor buttons for obtaining information on programs.

⑥ ENTER

Use to set the selected position of the cursor using the ②, ③, ④, and ⑦ buttons.

⑤I◄◄, ⑧►►I (GUIDE)

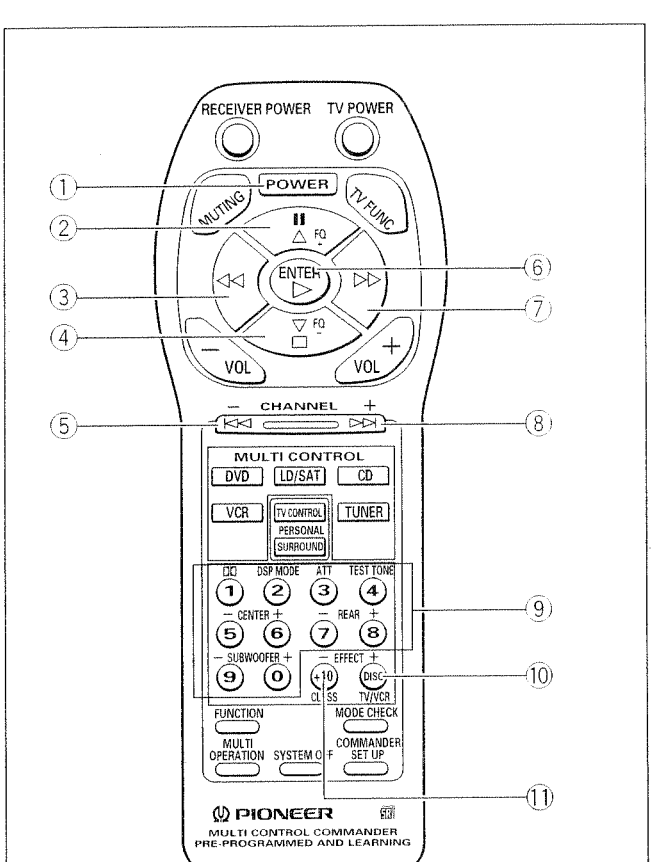
Use to turn ON/OFF the program information screen.

⑨ Number buttons

Use to select satellite broadcast channels.

⑩ (DISC) (MENU)

Use to turn ON/OFF the main menu.



CD PLAYER operation

Press the MODE CHECK button to light the CD button, and operate as desired using the following buttons.

① **POWER**

Use to turn ON/OFF the CD player.

② **II**

Use to pause playback.

③ **◄◄**

Continuously pressing this button fast reverses playback.

④ **■**

Stops playback.

⑤ **I◄◄**

Pressing and releasing this button immediately returns playback to the beginning of the track currently being played. Pressing it continuously returns playback to the beginning of a previous track.

⑥ **►**

Starts playback.

⑦ **►►**

Pressing this button continuously fast forwards playback.

⑧ **►►I**

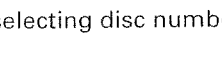
Pressing and releasing this button immediately advances playback to the beginning of the next track. Pressing it continuously advances playback to the beginning of a future track.

⑨ **Number buttons**

Use to select songs directly.

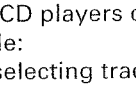
⑩ **DISC**

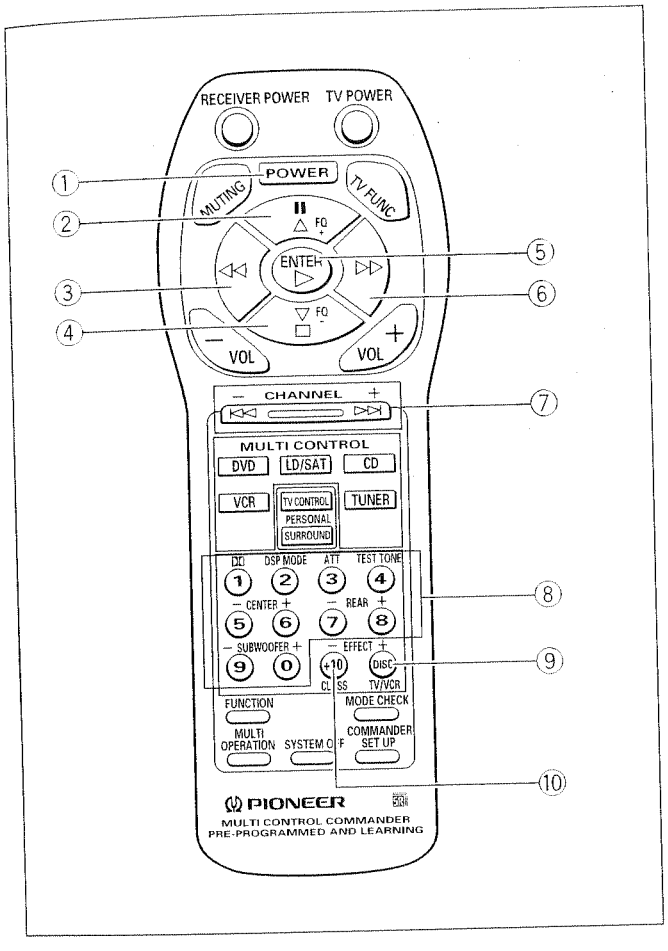
Use to select the disc number.
(Some CD players cannot be operated.)
Example:
When selecting disc number 27



⑪ **+10 (track) button**

Use to select the track number.
(Some CD players cannot be operated.)
Example:
When selecting track number 15





CASSETTE DECK/VCR operation

Press the MODE CHECK button to light the VCR button, and operate as desired using the following buttons.

memo

Both the cassette deck and VCR can not be used at the same time.

[Operations common to the cassette deck/ VCR]

(For double cassette decks, deck 2 will operate.)

① **POWER**

Use to turn ON/OFF the power of the cassette deck and VCR.
(Cannot turn ON/OFF some cassette decks.)

② ❚❚

Pauses playback and recording (sets still pictures).

③ ◄◄

Rewinds the tape. Pressing this button during playback starts fast rewind playback.

④ ■

Stops tape running.

⑤ ►

Starts playback.

⑥ ►►

Fast forwards the tape. Pressing this button during playback starts fast forward playback.

[VCR only]

⑦ **CHANNEL + , –**

Changes the channels of the TV tuner in the VCR.

⑧ **Number buttons**

Use for selecting the channels of the TV tuner in the VCR.

⑨ **TV/VCR**

Use to switch the VCR antenna output to TV or VCR.

⑩ **ENTER**

Sets the channels selected using the Number buttons. (Some models may not require this step.)

[Cassette deck only]

For double cassette decks, the ⑧ Number buttons can be used to operate deck 1 also.
(Some models cannot be operated.)

⑧ ①(◄◄)

Fast forwards the tape in the direction of the arrow.

②(■)

Stops tape running.

③(►)

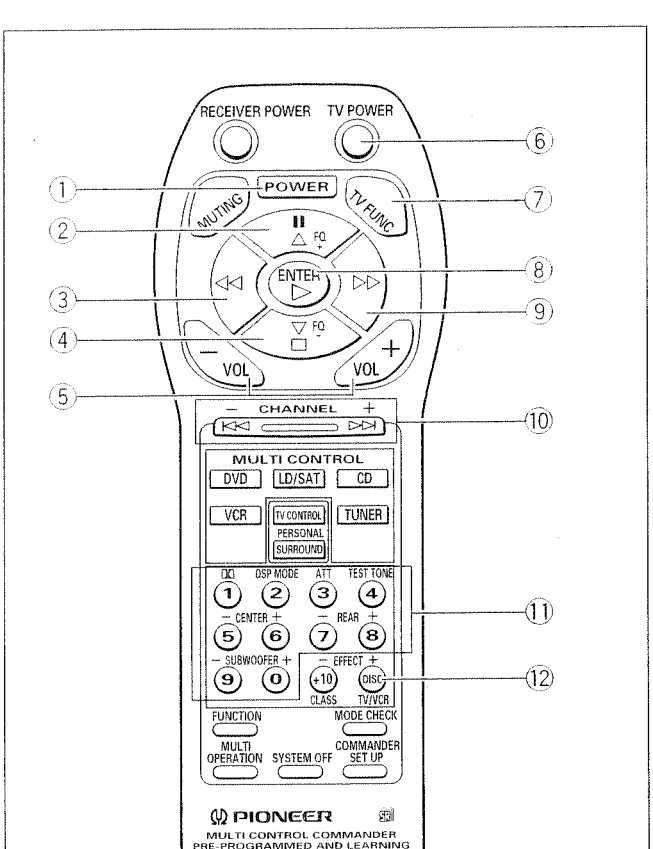
Plays back.

④(►►)

Fast forwards the tape in the direction of the arrow.

memo

Pressing ② ❚❚ and ④ ■ simultaneously will also set REC for the VCR and cassette deck.
REC cannot be set for deck 1 of double cassette decks.



TV operation

Press the TV CONTROL button, and operate as desired using the following buttons.

① POWER
Use to turn ON/OFF the TV power.

② ▲
Raises the TV volume.

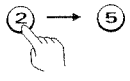
④ ▼
Lowers the TV volume.

⑤ VOL +, –
Use to adjust the TV volume. (When operating other devices, this is used for adjusting the volume of this unit.)

⑧ ENTER
Sets the channels selected using the Number buttons. (Some models may not require this operation.)

⑩ CHANNEL +, –
Use to select a TV broadcast channel.

⑪ Number buttons
Use to select TV broadcast channels.
Example: When selecting channel 25



With some models, press ⑧ ENTER after selecting the channel to set the selection.

[Operation for TVs with a menu screen (PIONEER products only)]
②▲,③◀,④▼,⑨▶
Use to move the cursor in the menu screen up, down, left, and right.

⑧ ENTER
Sets the position of the cursor selected using the ②, ③, ④, and ⑨ buttons.

⑫ (DISC) (MENU)
Displays the menu screen for adjusting picture quality.

The following buttons can be used regardless of the input source setting.

⑥ TV POWER
Use to turn ON/OFF the TV power.

⑦ TV FUNC
Use to select the TV input. (Cannot be selected with some TVs.)

MODE CHECK BUTTON

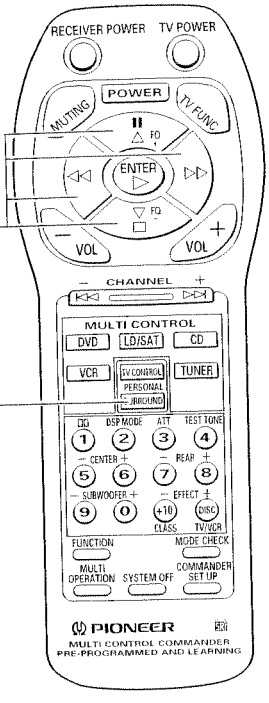
When the MODE CHECK button is pressed once, the MULTI CONTROL button of the function currently selected will light.
When the MODE CHECK button is pressed again while lit, the MULTI CONTROL buttons will light in order. This enables the function of the lit button to be remote controlled without having to set the function on this unit.

4. VARIOUS OPERATIONS

SETTING MODE

To utilize the surround effects of this unit to the fullest, set according to the speaker system in use. (When using for the first time, or when the speaker system has been changed, set the setting mode.)

Operating the setting mode

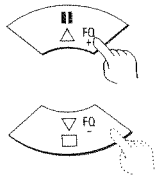


2,3

1

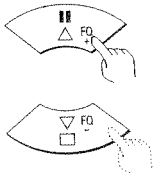
1. **Select the SURROUND button to enable SURROUND operation.**

2. **Recall the setting mode.**



➡ The previously set setting mode will be recalled. The settings will be displayed for 20 seconds.

3. **Select the setting mode.**



➡

- SPEAKER setting mode
- SUB WOOFER ON/OFF mode
- Crossover frequency setting mode
- LFE attenuator setting mode
- Low cut filter ON/OFF setting mode
- CENTER delay time setting mode
- REAR delay time setting mode
- Dynamic range control setting mode
- REAR balance setting mode

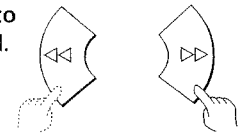
4. **While the setting mode is displayed, set in detail according to the "Contents and changes of the setting mode" on page 32.**

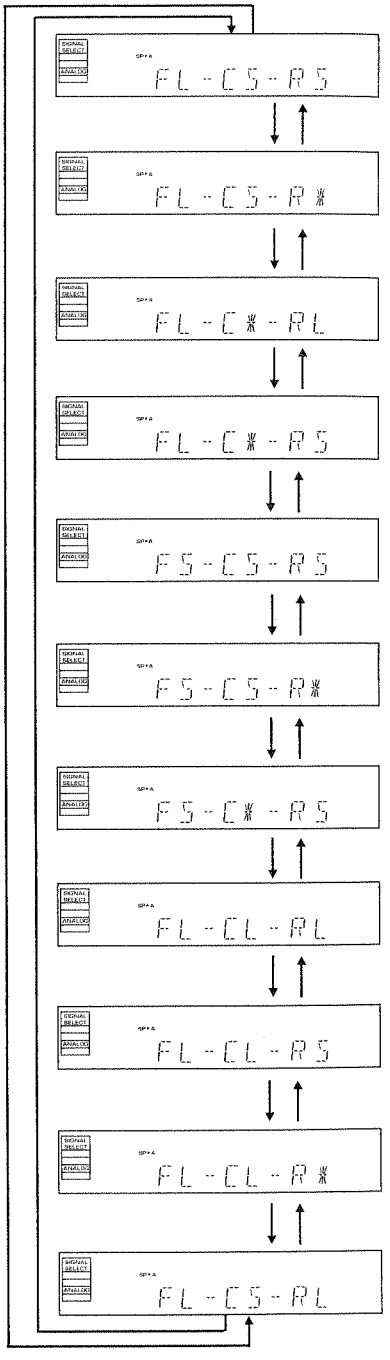
Contents and changes of the setting mode

① SPEAKER setting mode

Sets whether front, center and rear speakers of the system are used or not, and their sizes.

Switch the setting mode according to the speaker system currently installed.





In the displays, F stands for FRONT, C for CENTER, R for REAR, L for LARGE, S for SMALL, and * for no speakers.

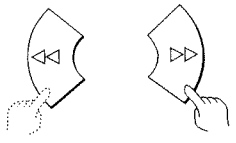
memo

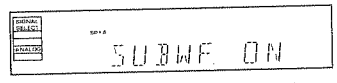
- Initially, the speakers are set as follows:
  FRONT: Large, CENTER: Small, REAR: Small
- When judging whether a speaker is large or small, please note that a standard large speaker has a cone size larger than 12 cm.

② SUB WOOFER ON/OFF setting mode

Sets whether SUB WOOFER (special bass speaker) is used or not.

Turn ON/OFF the SUB WOOFER.





It turns ON or OFF each time the button is pressed.

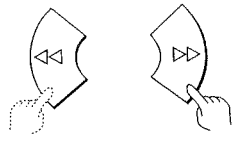
memo

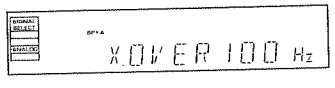
- Initially, it is set to OFF.
- If SMALL is selected for the FRONT speaker in the SPEAKER mode, SUB WOOFER is set to ON, and cannot be turned OFF.

③ Crossover frequency setting mode

Low-range bass sounds cannot be reproduced on speakers set to SMALL in the ① SPEAKER setting mode. In this case, set how much low-range sound (below how many Hz) is to be directed to the other speakers during playback.

Set the crossover frequency.





100 Hz → 150 Hz
200 Hz ←

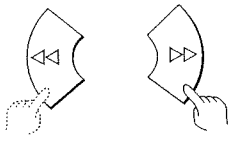
memo

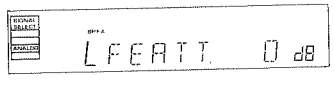
- Initially, it is set to 100Hz.
- It is recommended that it be set to 200Hz when only small speakers are used, although this depends on the efficiency of the speaker.
- If all speakers (front, center, rear) are set to LARGE in ① SPEAKER setting mode, crossover frequency cannot be set.

④ LFE Attenuator setting mode

If this ultra bass component (LFE channel) distorts the sound from the speakers, set to attenuate the level.

Set the attenuation level.





0dB → 10dB
∞ (Display/**)

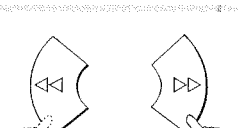
memo

Initially, it is set to 0 dB.

⑤ Low cut filter ON/OFF setting mode

Turn ON the low cut filter when distorted sound is output through the sub woofer.

Turn ON/OFF the low cut filter.



It turns ON or OFF each time the button is pressed.

memo

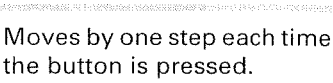
- Initially, it is set to OFF.
- If the SUB WOOFER is set to OFF in the SUB WOOFER ON/OFF mode, the low cut filter cannot be set.

⑥ CENTER delay time setting mode

Normally as the CENTER speaker is placed directly in front in the listening room, it is closer to the listening position than the FRONT speakers. This means that the sound from the CENTER speaker will be heard before the FRONT speakers. To prevent this, set the CENTER delay time setting mode to delay the sound from the CENTER speaker so that the sound from the FRONT and CENTER speakers will be heard at the same time.
One step equals about 30 cm.

Set the CENTER delay time.

Moves by one step each time the button is pressed.



S:SHORT
L:LONG
Can be set up to 6 steps.

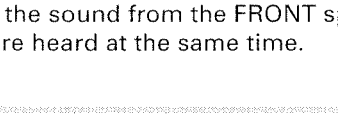
memo

- Initially, it is set to the shortest time (0 ms).
- When it is set to no CENTER speaker in ① SPEAKER setting mode, the CENTER delay time cannot be set.
- The CENTER delay time is effective only in Dolby Digital.

⑦ REAR delay time setting mode

Like the ⑥ ENTER delay time setting mode, set so that the sound from the FRONT speakers to the listening position and that from the REAR speakers to the listening position are heard at the same time.
One step equals about 1 to 1.5m.

Set the REAR delay time.



Moves by one step each time the button is pressed.

Can be set up to 4 steps.

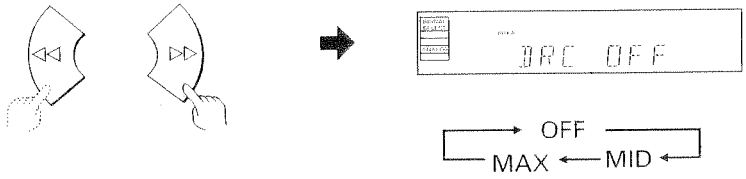
memo

- Initially, the distance from the listening position to the REAR speakers is set shorter than that to the FRONT speakers.
- When it is set to no REAR speakers in ① SPEAKER setting mode, the REAR delay time cannot be set.
- The REAR delay time is effective in the Dolby mode (both for Dolby Digital and Pro-Logic).

⑧ Dynamic range control mode

Dynamic range means playback performance. It indicates in decibels how loud and low-level sounds can be played back properly (so that low-level sounds are not covered by noises and the loud sounds are not distorted). Dynamic range control is a function which compresses this dynamic range. Even when watching a movie with the volume set to a low-level, setting this function enables low level sounds to be heard more easily.

Set the dynamic range control mode.



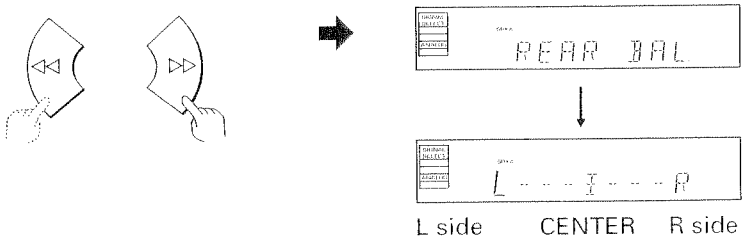
memo

- Initially, it is set to OFF.
- When raising the volume level, set to OFF.

⑨ REAR balance setting mode

Adjusts the left and right volume balance of the REAR speakers.

Set the REAR balance.



memo

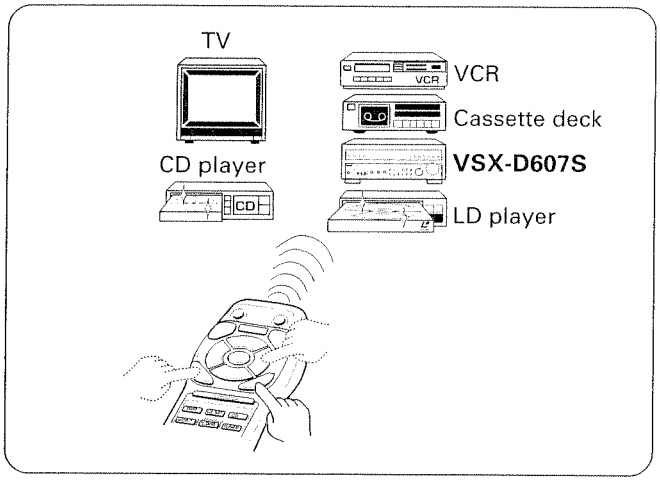
- Initially, it is set to CENTER.
- When the ① SPEAKER setting mode is set to no REAR speaker or when the Surround mode is OFF, REAR balance cannot be set.

USEFUL FUNCTIONS OF THE REMOTE CONTROL UNIT [ISC (Intelligent System Control)]

ISC is the given name for a new operating method of AV components proposed by PIONEER.
With the provided remote control unit, the following operations can easily be performed.

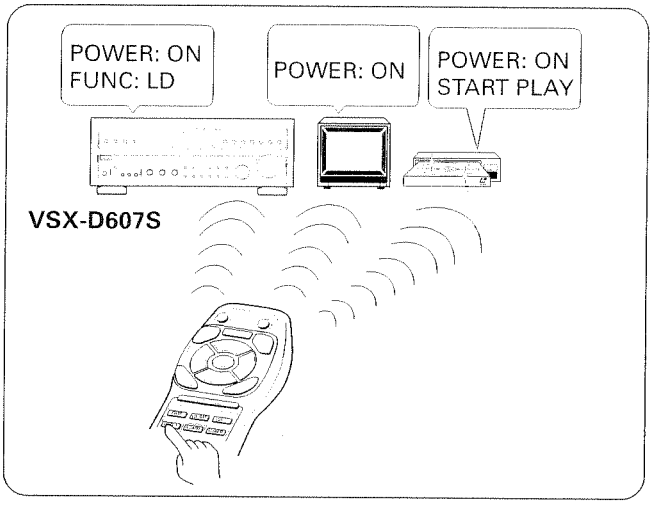
■ Control of other equipment

Your PIONEER products and other manufacturers' equipment (VCR, TV, LD player, CD player, etc.) can be controlled using this unit's remote control. (This requires the learning and setting of the remote control codes of other manufacturers' equipment.)



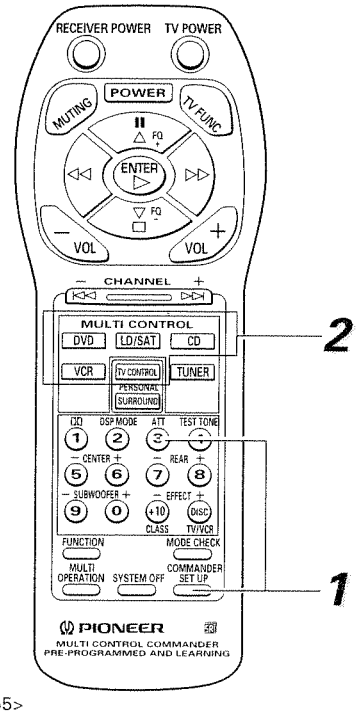
■ Multi Operation

Performing multi operation settings using this units remote control enables several devices to be operated easily.

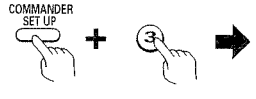


Operating other equipment using this unit's remote control (Preset mode)

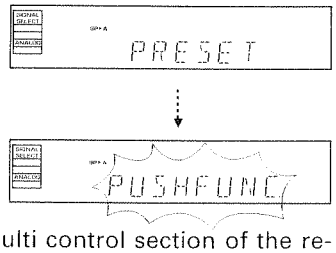
The remote control unit can be used to operate your PIONEER products and other manufacturers' audio/video equipment (VCR, TV, LD player, CD player, etc.).
Perform the following procedure to enable operation of other manufacturers' equipment.



1. **Set the preset mode.**

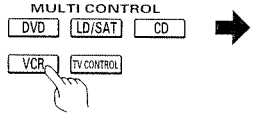


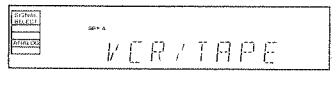
While pressing the COMMANDER SET UP button, press ③.



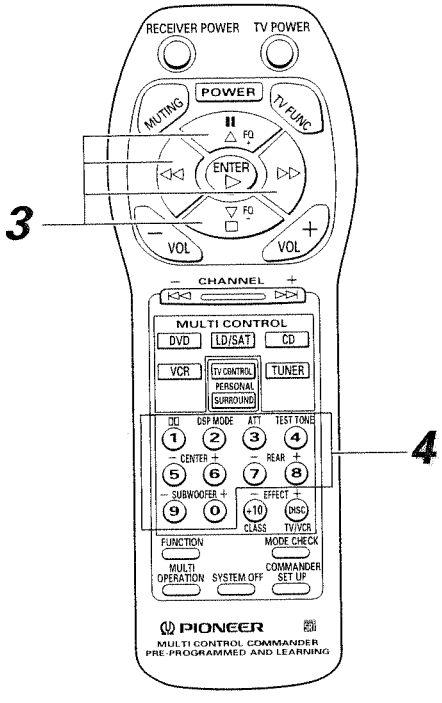
* Multi control section of the remote control unit will blink.

2. **Select the function to be set.**

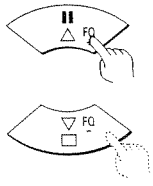




* The function button selected lights.

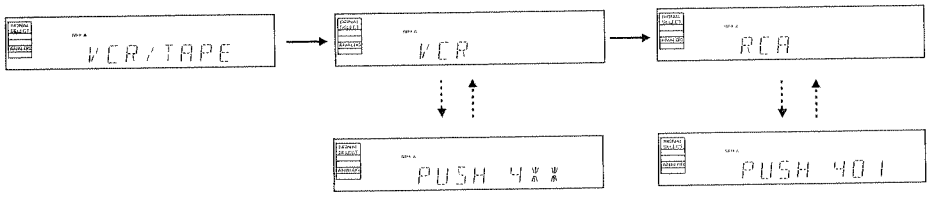


3. **While observing the display, find the manufacturer name and code.**



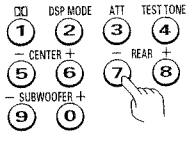
Each time the button is pressed, a different preset manufacturer name will be displayed. Display the name of the manufacturer whose equipment you are using and its code will be displayed automatically.

When the ▼ button is pressed, the manufacturer names are displayed in the reverse order.



4. **Point the remote control unit towards the device to be operated, and input the three-digit code number confirmed in step 3.**

* Refer to the LIST OF MANUFACTURER CODES on page 48.

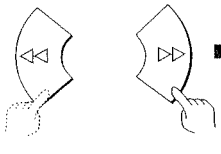


When a three-digit code number is input, the power ON/OFF signal will be output from the remote control unit. If the power of the device turns ON or OFF according to this signal, it indicates that the device has been set properly. If the power does not turn ON/OFF, input another code or use the learn function.

■ When there are several manufacturer codes for one manufacturer

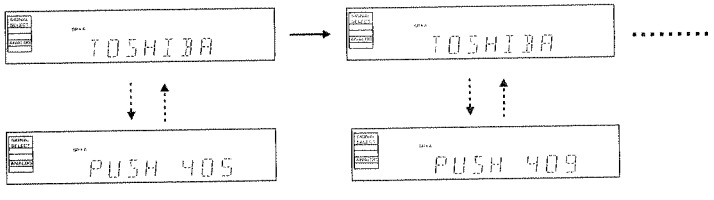
Some manufacturers use several remote control signals. In such cases, the device may not operate even if the manufacturer code displayed at the beginning is input. Perform the following steps, and look for another manufacturer code.

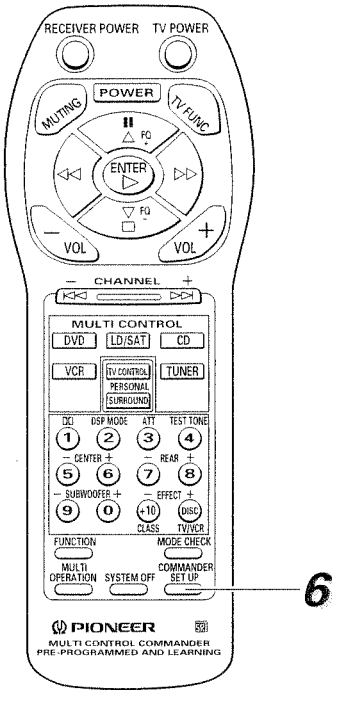
Look for another code of the manufacturer.



Each time these buttons are pressed, other preset codes of the manufacturer will be displayed.

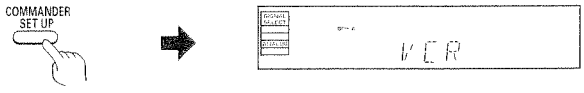
Example: For TOSHIBA





5. **Repeat steps 2 and 4 and set other functions.**

6. **Exit the preset mode.**



Returns to normal operation.

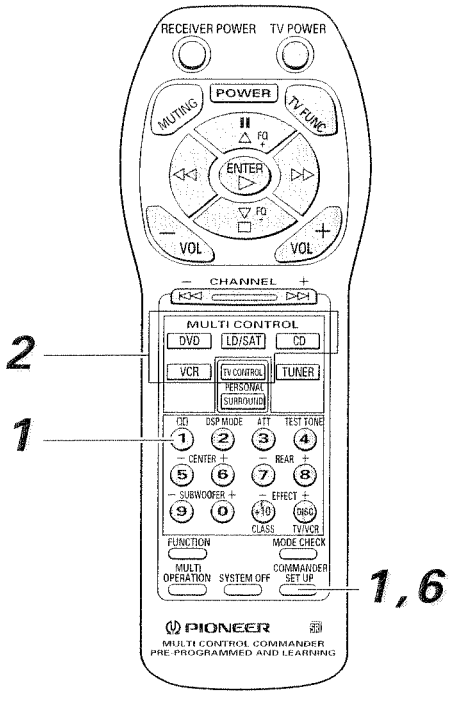
* Multi control section of the remote control unit will go off.

memo

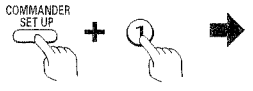
When operating a DVD LD player with the LD/SAT function, set the manufacturer code to "102" in the preset mode.

Memorizing other manufacturers' signals (Learning mode)

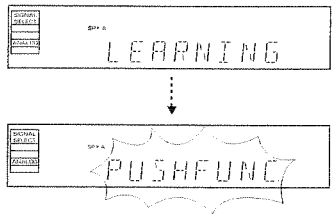
If your equipment does not set properly in the preset mode, set its remote control signals in this mode. Even if your equipment set properly in the preset mode, remote control signals of additional functions can be set (those not shown in pages 27 to 30).



1. **Set the learning mode.**

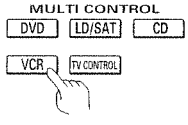


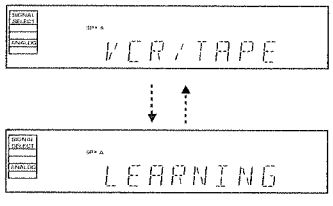
While pressing the COMMANDER SET UP button, press ①.



* Multi control section of the remote control unit will blink.

2. **Select the function to be learned.**



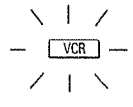


* Only the multi control button selected blinks.

3. **Select the button of the function to be learned using the remote control unit.**

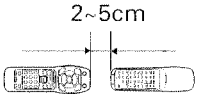
* Select from the gray buttons in the left figure of the remote control unit.

The remote control unit is ready to memorize the operation in the selected button.



* The multi control button of the remote control unit stops blinking and lights.

4. **Face the remote control units at each other. Press the button of the operation of the other manufacturers' device to be learned. (Press until the multi control button blinks.)**



* When learned, the multi control button of the remote control unit starts blinking.

5. **Repeat steps 2 to 4, and learn other required functions.**

6. **Exit the learning mode.**

Return to normal operations.

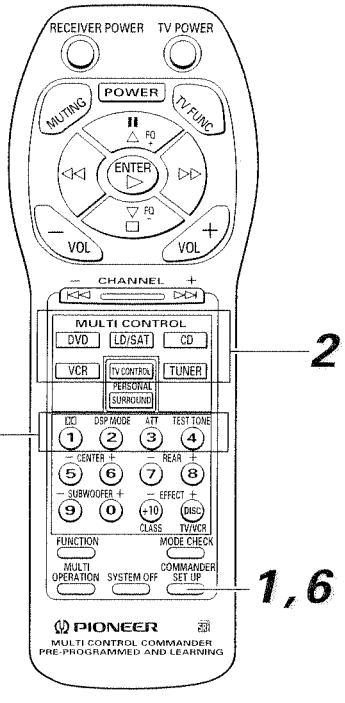
* All multi control buttons will go off.

memo

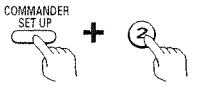
- The TV POWER, TV FUNC, VOL – and + buttons can only be used for learning when TV CONTROL is selected.
- When TV CONTROL has been selected, memorize the same remote control signal into both TV POWER and POWER.
- There is a limit to the number of signals which can be learnt. When the memory area for learning becomes full, all MULTI CONTROL buttons will blink three times to indicate that no signals can be learnt any further.

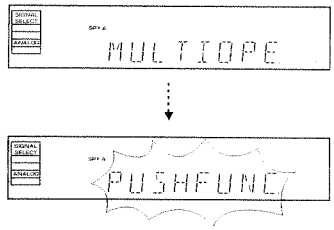
Turning ON/OFF the power of several devices (Multi Operation)

The power of devices connected to this unit can be turned ON/OFF with its remote control unit, and operated with the MULTI-OPERATION button of this remote control unit.



1. **Set the multi operation mode.**

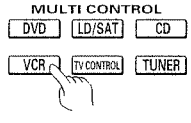


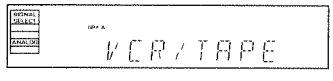


While pressing the COMMANDER SET UP button, press ②.

* Multi control section of the remote control unit blinks.

2. **Select the desired function.**





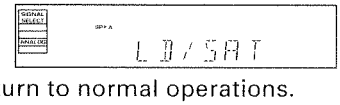
* Only the multi control button selected lights.

3. **Select the operation to be set from the table below, and press the corresponding number button.**

* Multi control section of the remote control unit blinks.

4. **To continue setting, repeat steps 2 and 3, and set each multi operation function.**

5. **Exit the multi operation mode.**



Return to normal operations.

* Multi control section will go off.

memo

- For the DVD and CD players, VCRs and cassette decks, the PLAY signals are output from the remote control unit.
- When the TV preset code is set to the DVD/TV function and the selected MULTI CONTROL function is aTV, a remote control signal is not output if Number Button ③ is selected from the table below. To turn ON/OFF the TV POWER, set to ② or ④.

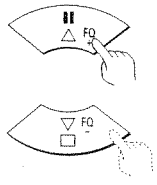
■ Multi Operation Table

Number Button	RECEIVER POWER	TV POWER	SELECTED DEVICE POWER	►
①	YES →	NO →	NO →	YES
②	YES →	NO →	YES →	YES
③	YES →	YES →	NO →	YES
④	YES →	YES →	YES →	YES

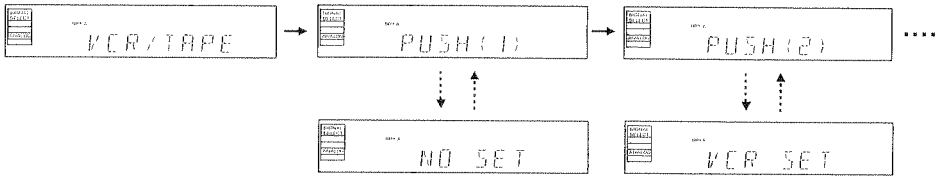
YES: Activated NO: Not activated

memo

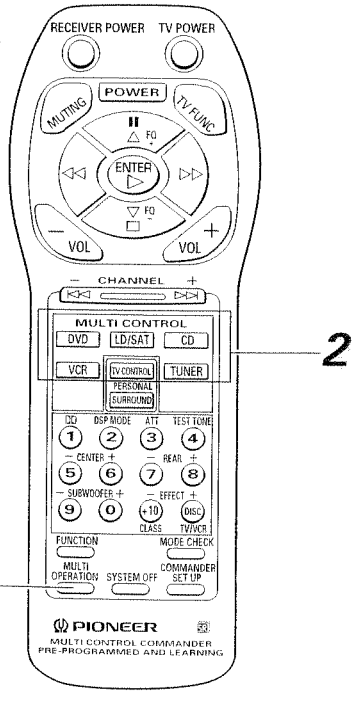
The multi operation can be set while watching the display. (Refer to step 3 on page 40.)



➡ Each time the buttons are pressed, a multi operation is displayed.



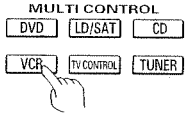
Performing Multi Operation



1. Enter the multi operation mode.

➡ All multi control buttons of the remote control unit blink.

2. Select the desired function.



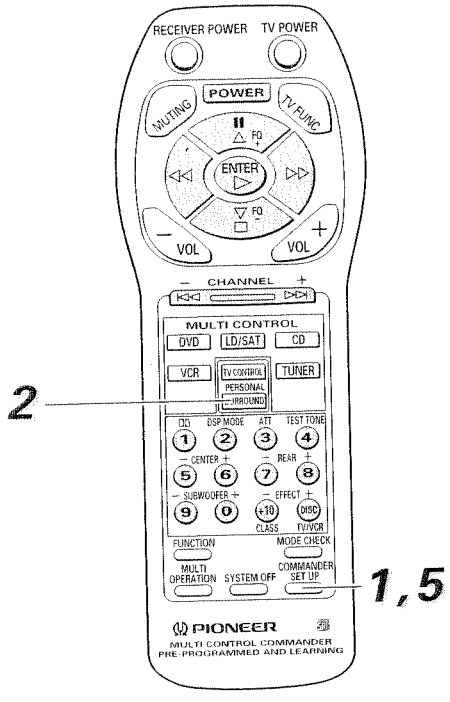
➡ The power of this unit is turned ON, the function switches, and the power of the selected device turns ON/OFF according to the settings on page 40. (Some devices may start playback after this, such as a DVD player, CD player, LD player, VCR or cassette deck.)

memo

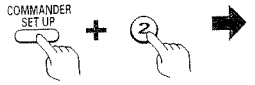
The power of this unit does not turn on when TV CONTROL is selected.

Multi Operation/Personal Mode

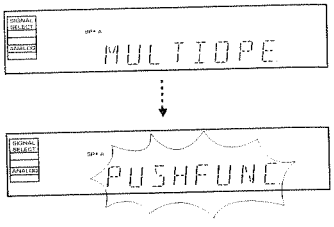
Up to 10 signals sent from the remote control unit (including learned signals) can be selected and set to personalize control of your equipment. For example, you can turn on the power of the unit, TV and LD player and start LD playback. The remote control signals of the shaded buttons in the following diagram can be set.



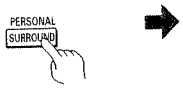
1. **Set the multi operation mode.**

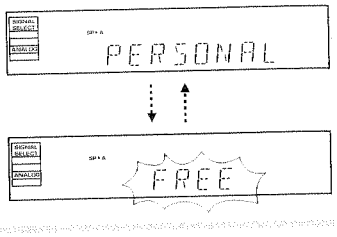


Press (2) while pressing the COMMANDER SET UP button.



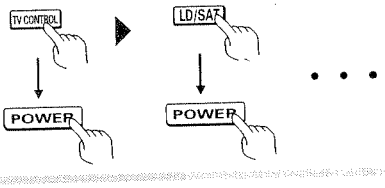
2. **Set the personal mode.**





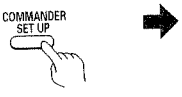
Example:

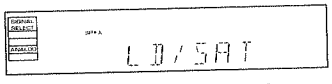
3. **Set the functions to be learned in order.**



4. **Repeat step 3, and memorize the remote control signals (up to 10).**

5. **End the multi operation (personal mode).**



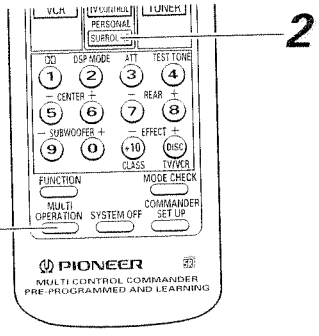


Return to normal operations.

memo

When 10 signals are memorized, the setting mode automatically ends and the unit returns to normal operation.

Operating the Personal Mode

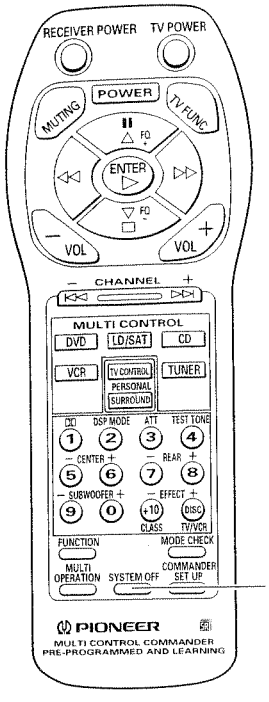


1. **Set the multi operation mode.**

2. **Set the multi operation mode (personal mode).**

Example: Turns ON the power of the unit, TV and LD player and starts LD playback.

Turning OFF the power of the system



SYSTEM OFF

Turn OFF the power of the system including this unit.

➡ Equipment will turn OFF according to the multi operation settings.

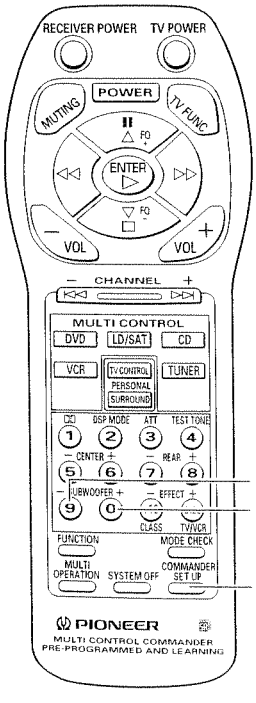
Example:
If you selected VCR at MULTI CONTROL, and set VCR/TAPE to "14" in the Multi Operation Table on page 40, the power of the TV and VCR will also go OFF.

memo

- With some devices that have been turned OFF, turning OFF the system will turn ON the power.
- All the PIONEER products will turn OFF.

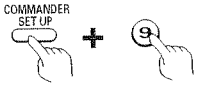
Canceling remote control settings

Cancels settings that have been set or learned.



9
0
COMMANDER SET UP

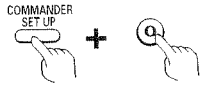
Erase the learned contents.



➡ All multi control buttons of the remote control will blink. After blinking three times, all settings will be cancelled.

While pressing the COMMANDER SET UP button, press 9 for more than 3 seconds.

Cancel the setting.

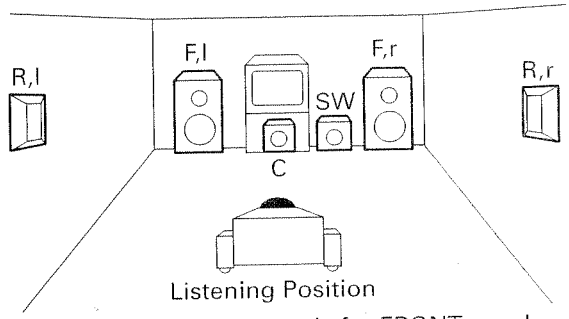


➡ All multi control buttons of the remote control will blink. After blinking three times, all settings will be canceled.

While pressing the COMMANDER SET UP button, press 0 for more than 3 seconds.

SURROUND

Surround type

Dolby Digital (AC-3)	Dolby Pro Logic Surround
Mode for enjoying movie and music software bearing the DOLBY DIGITAL (DOLBY SURROUND) mark. Dolby digital (AC-3) is a compression format which records the sound of 6 channels of the theater surround system (DOLBY Surround Digital) on the movie film digital track. Of the 6 channels, the sub woofer channel is intended for bass only, and because the frequency range is smaller than the main channel, it is expressed as the 5.1 channel.	Set to this position for movie and music sources (especially software bearing the DOLBY SURROUND mark). The Dolby Pro Logic Surround continuously detects the size and direction of the signal. This clarifies the position of the sound source, reproducing natural sound flow.  * In the above figure, F stands for FRONT speakers, R for REAR speakers, C for CENTER speakers, SW for sub woofer, r for right, and l for left.

Manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby", "AC-3", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation. Copyright 1992 Dolby Laboratories, Inc. All rights reserved.

■ DSP mode

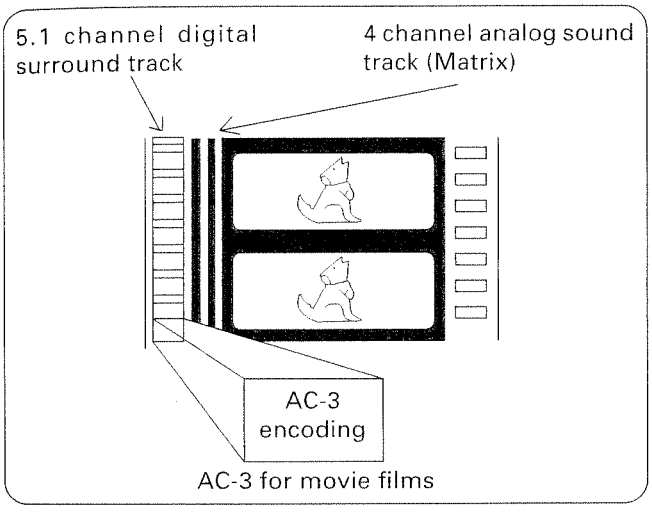
HALL	Simulates the acoustic effects of a large concert hall. Suitable for classical music. Long delay time of reflected sounds (approx. 20 to 200 ms), coupled with reverberation effects let the listener enjoy the dynamic and beautiful sounds characteristic of concert halls and powerful orchestral performances.
JAZZ	Simulates the acoustic effects of general jazz clubs with a floor space of around 400m^2 (approx.4200ft^2). Reflected sound is virtually below 100 ms, for the listener to enjoy live-band effects.
DANCE	Simulates the acoustic effects of discos with a square dance floor. Features strong bass sound. Reflected sound delay time is virtually below 50 ms, for the listener to enjoy the "fever" of disco sounds.
THEATER 1	Sets the delay time of the reflected sound best suited for playing back acoustic parameters of a medium-sized movie theater (with seating capacity of 300) in your living room. (About 30 to 120 msec.)
THEATER 2	Reproduces theater sound field effects without losing the localization of each channel. Theater effects can be enjoyed without losing Dolby Digital (AC-3) or Dolby Pro Logic effects when used in combination.

memo

Use of THEATER 1 or 2 together with the Dolby mode [Dolby Digital (AC-3) or Dolby Pro Logic] will produce better surround effects.

Dolby Digital (AC-3)

Dolby Digital (AC-3) is the name of the Dolby surround multi-channel digital system that was developed after the Dolby Surround System and Dolby Pro Logic Surround System.
As this system allows analog sounds to be recorded on film, films can be shown in movie theaters with the analog audio system only.

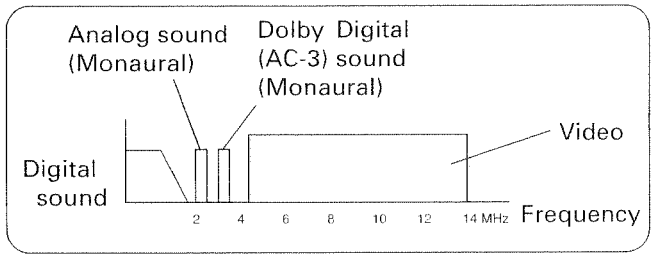


The number of movies made using Dolby Digital since 1992 has exceeded 300 and continues to increase. For compact disc players and laser disc digital sounds, 16 bits are used to sample the original analog audio waveform and sampling is carried out 44,100 times every second. However because an enormous amount of recording signal data is required for the multi channel system with this method, AC-3 is used to compress the data.

In reproducing audio signals, the smaller the bit number used, the lower the sound quality. With AC-3, any drop in auditory sound quality is prevented by using masking technology and digital filtering technology based on personal auditory characteristics.

■ Laser disc format

Laser discs are now available on the market in large numbers. This means that the recording of different format audio signals on the laser disc raises the important question of compatibility with existing laser discs. Dolby Digital (AC-3) records signals using one analog audio channel to maintain this compatibility with existing discs and players.
As shown in the following figure, the digital audio sounds of Dolby Digital (AC-3) discs can be played back as currently done. Analog sounds are played back by using the other channel without the Dolby Digital (AC-3) signals for monaural audio signals.



■ Comparison with Dolby Pro Logic Surround

Dolby Digital (AC-3) is also known as the 5.1 channel system. It is equipped with 5 channels (front left, front right, center, rear left, rear right) in the frequency range from 20 Hz to 20 kHz and an independent sub woofer channel. The sub woofer channel is also called LFE (Low Frequency Effect).
The LFE channel can be used as desired to enjoy strong bass sounds.
The following table shows the comparison with Dolby Pro Logic Surround effects.

	Dolby Digital (AC-3)	Dolby Pro Logic Surround
No. of recording channels	5.1 channels (Max.)	2 channels
No. of playback channels	5.1 channels (Max.)	4 channels
Playback channel structure	Front left, front right, center, rear left, rear right, sub woofer	Front left, front right, center, rear
Sound processing	Digital discrete processing	Analog matrix processing
Rear (Surround) high frequency playback limit	20,000 Hz	7,000 Hz
Other	● 5.1 channel is completely independent ● High dynamic range ● Stable position, high phase characteristics, and advanced surround effects reproduction	

TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used. If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Symptom	Cause	Remedy
The power does not turn ON.	• The power plug is disconnected from the outlet. • The cause may lie in the protection circuit.	• Insert into the wall outlet. • Disconnect the power plug from the outlet, and insert again.
The unit does not work even when the buttons are pressed.	• Due to effects of static electricity when the air is dry.	• Press the front panel RESET button. • Disconnect the power plug from the outlet, and insert again.
No sound is output when a function is set.	• Not properly connected. • Sound is muted. • The volume is turned down. • The TAPE 2 MONITOR is ON. • The speaker switch is OFF.	• Refer to pages 12 to 15 and connect again. • Press the MUTING button on the remote control unit. • Adjust MASTER VOLUME. • Press the TAPE 2 MONITOR button. • Press the SPEAKER button of terminal (A/B) connected to the speakers.
No image is output when a function is set.	• Not properly connected. • The input source is not properly selected.	• Refer to pages 12 and 13, and connect again. • Press the correct button.
Considerable noise in radio broadcasts.	• Not received at proper frequency. • The antenna is not connected. • AC-3 RF and digital signal connection wires are near the antenna terminal and antenna wires.	• Receive the correct frequency. • Connect the antenna properly. (P. 12 and 13) • Distance the AC-3 RF and digital signal wires from the antenna terminal and antenna wires.
	[FM broadcast reception] • The FM antenna is not stretched out, and faces an inappropriate direction. • Weak radio waves.	• Stretch out the antenna and secure it to a wall while selecting the direction and position with the best reception state. • Change the FM antenna to an outdoor antenna of multiple elements. (P. 12)
	[AM broadcast reception] • The AM antenna faces inappropriate direction. • Weak radio waves. • Affected by other equipment. (Fluorescent lamp, motor, etc.)	• Select the direction and position with the best reception state. • Connect a 5 to 6 meter long vinyl-coated wire to the AM antenna terminal and extend the wire outdoors, if possible. (P.12) • Turn off the equipment which cause noise or move it away from the unit. • Distance the antenna from the equipment which cause noise.
Broadcast stations cannot be selected automatically.	• Weak radio waves.	• Change the FM antenna to an outdoor antenna of multiple elements. (P. 12)

Symptom	Cause	Remedy
No sound from rear or center speakers.	● Settings are incorrect. ● Rear or Center level is turned down. ● The REAR or CENTER speaker is disconnected.	● Refer to page 31, and set. ● Raise the level. ● Connect. (P. 12 and 13)
Sound is produced from other functions, but no sound from LD player or DVD player. Either no Dolby digital sound.	● SIGNAL SELECT is set to other input signal than that connected to. ● The setting of OPTICAL selector is incorrect.	● Set the SIGNAL SELECT to AUTO. (P. 17) ● Confirm the setting of OPTICAL selector. (P. 17)
Cannot be remote controlled.	● The remote control unit batteries have worn out. ● Too great of a distance. Bad angle. ● There is an obstacle blocking signals in between the unit and the remote control. ● Strong light such as fluorescent light is shining onto the remote sensor of the main unit.	● Replace the batteries. (P. 7) ● Operate within 7m and 30 degrees from the left and right of the main unit's remote sensor. ● Remove the obstacle or operate from somewhere else. ● Avoid direct exposure of the remote sensor to the light.

If the unit does not operate normally due to external effects such as static electricity, press the RESET button on the front panel or disconnect the power plug from the outlet and insert again to return to normal operating conditions.

LIST OF MANUFACTURER CODES

Device	Manufacturer	Manufacturer Code
DVD	TOSHIBA	001
	SONY	002
	PANASONIC	003
	JVC	004
	SAMSUNG	005
	PIONEER	000
LD	SONY	101
	PANASONIC	105,106
	KENWOOD	103
	PHILIPS	104
	MITSUBISHI	100
	RCA	107
	PIONEER	100
		102 (DVD code)
SAT	RCA	201,203
	SONY	202
	PIONEER	200
VCR	RCA	401,406,408,414,405,413,411
		415
	ZENITH	403,404,417
	MAGNAVOX	414,408,426,403
	FISHER	410,426,412,427,425,420
	PANASONIC	408,432,433
	TOSHIBA	405,409,426
	JVC	428,430,429,408,414,431,407
	HITACHI	408,401,406,436,434
	SONY	416,417,404,408
	MITSUBISHI	409,420,421,422,423,424,408
		407
	SANYO	410,412,425,435
	SHARP	402,418,419
	GOLDSTAR	411,409
	OPTIMUS	408,432,433,402,418,419
	GRANDIENTE	452
	PIONEER	400
TAPE	SONY	801,806
	TECHNICS	803
	KENWOOD	804,807
	TEAC	805
	DENON	810
	ONKYO	809,808
	YAMAHA	811,812
	JVC	802
	FISHER	813
	OPTIMUS	800
	PIONEER	800
CD	SONY	301,316,317,318
	TECHNICS	304,326
	KENWOOD	310,321,311
	DENON	309
	RCA	302,319,313
	PHILIPS	312,322
	YAMAHA	315,314,328
	JVC	303
	TEAC	305,306,327,324,325
	ONKYO	320,308,307
	MARANTZ	323,312,324
	SANYO	313
	OPTIMUS	300
	PIONEER	300
TV	RCA	601,610,615,616,617,618
	ZENITH	603,620
	MAGNAVOX	607,610,603,612,629
	GE	601,608,607,610,617,602,628
		618
	PANASONIC	608,622,607
	SONY	604
	TOSHIBA	605,602,626,621
	MITSUBISHI	609,610,602,621
	HITACHI	606,610,624,625,618
	JVC	613,623
	SHARP	602,619,627
	SANYO	621,614
	PHILIPS	607
	GOLDSTAR	610,623,621,602
	RADIO SHACK	610,623,621,602
	GRADIENTE	635
	PIONEER	600
CATV	JERROLD	711,701,702,712,704,713,703
		714,716,715
	S.A.	705,706,708,709
	ZENITH	707,717,710
	PIONEER	700

* The manufacturer codes of CATV are preset into TV CONTROL.

SPECIFICATIONS

Continuous Power Output (DIN)
Front (1 kHz, T.H.D. 1 %, 8 Ω) ..... 130 W + 130 W

Input (Sensitivity/Impedance)
PHONO MM ..... 2.8 mV/47 kΩ
LD/SAT, CD, VCR/TAPE 1, TAPE 2
DVD/TV, VIDEO ..... 200 mV/47 kΩ
Phono Overload Level (T.H.D. 0.1 %, 1kHz)
PHONO MM ..... 100 mV
Frequency Response
PHONO MM ..... 20 Hz to 20,000 Hz ± 0.3 dB
LD/SAT, CD, VCR/TAPE 1, TAPE 2
DVD/TV, VIDEO ..... 5 Hz to 100,000 Hz $^{+0}_{-3}$ dB
Output (Level/Impedance)
VCR/TAPE 1 REC, TAPE 2 REC ..... 200 mV/2.2 kΩ
Tone Control
BASS ..... ± 9 dB (100 Hz)
TREBLE ..... ± 9 dB (10 kHz)
Signal-to-Noise Ratio (IHF, short circuited, A network)
PHONO MM ..... 75 dB
LD/SAT, CD, VCR/TAPE 1, TAPE 2, DVD/TV, VIDEO ..... 97 dB
Signal-to-Noise Ratio [EIA, at 1 W (1kHz)]
PHONO MM ..... 75 dB
LD/SAT, CD, VCR/TAPE 1, TAPE 2, DVD/TV, VIDEO ..... 80 dB

VIDEO Section

Input (Sensitivity/Impedance)
LD/SAT, VCR, DVD/TV, VIDEO ..... 1 Vp-p/75 Ω
Output (Level/Impedance)
VCR REC, MONITOR TV ..... 1 Vp-p/75 Ω
Frequency Response
LD/SAT, VCR, DVD/TV, VIDEO
→ MONITOR ..... 5 Hz to 7 MHz $^{+0}_{-3}$ dB
Signal-to-Noise Ratio ..... 55 dB
Cross Talk ..... 55 dB

FM Tuner Section

Frequency Range ..... 87.5 MHz to 108 MHz
Usable Sensitivity ..... Mono: 11.2 dBf, IHF (1.0 μV/75 Ω)
50 dB Quieting Sensitivity ..... Mono: 16.8 dBf
..... Stereo: 38.6 dBf
Signal-to-Noise Ratio ..... Mono: 73 dB (at 85 dBf)
..... Stereo: 70 dB (at 85 dBf)
Distortion ..... Stereo: 0.5 % (1kHz)
Alternate Channel Selectivity ..... 60 dB (400 kHz)
Stereo Separation ..... 40 dB (1 kHz)
Frequency Response ..... 30 Hz to 15 kHz (± 1) dB
Antenna Input ..... 75 Ω unbalanced

AM Tuner Section

Frequency Range ..... 531 kHz to 1,602 kHz (9 kHz step)
530 kHz to 1,700 kHz (10 kHz step)
Sensitivity (IHF, Loop antenna) ..... 350 μV/m
Selectivity ..... 25 dB
Signal-to-Noise Ratio ..... 50 dB
Antenna ..... Loop antenna

Miscellaneous

Power Requirements ..... AC 110 V/120-127 V/220 V/240 V
(Switchable), 50/60 Hz
Power Consumption ..... 295 W
In Standby Condition ..... 2.5 W
AC Outlet
SWITCHED ..... 100 W MAX
Dimensions ..... 420 (W) × 158 (H) × 374 (D) mm
Weight (without package) ..... 9.8 kg

Furnished Parts

FM Antenna 1
AM Loop Antenna 1
Dry Cell Batteries (AA/LR6) 2
Remote Control Unit 1
Operating Instructions 1
Sub Instruction Manual (Remote Control Unit) 1
Sub Instruction Manual [Dolby Digital (AC-3)] 1
Warranty Card 1

NOTE:
Specifications and the design are subject to possible modifications without notice, due to improvements.

MAINTENANCE OF EXTERNAL SURFACES

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzine, insecticide sprays or other chemicals on or near this unit, since these will corrode the surfaces.

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